

## 5 AAC 96.625. JOINT BOARD PETITION POLICY

*(effective September 19, 2019)*

(a) Under AS 44.62.220, an interested person may petition an agency, including the Boards of Fisheries and Game, for the adoption, amendment, or repeal of a regulation. The petition must clearly and concisely state the substance or nature of the regulation, amendment, or repeal requested, the reason for the request, and must reference the agency's authority to take the requested action. Within 30 days after receiving a petition, a board will deny the petition in writing, or schedule the matter for public hearing under AS 44.62.190--44.62.210, which require that any agency publish legal notice describing the proposed change and solicit comment for 30 days before taking action. AS 44.62.230 also provides that if the petition is for an emergency regulation, and the agency finds that an emergency exists, the agency may submit the regulation to the lieutenant governor immediately after making the finding of emergency and putting the regulation into proper form.

(b) Fish and game regulations are adopted by the Alaska Board of Fisheries and the Alaska Board of Game. Annually, the boards solicit regulation changes through regulatory proposals described in 5 AAC 96.610(a). Several hundred proposed changes are usually submitted to each board annually. The Department of Fish and Game compiles the proposals and mails them to all fish and game advisory committees, and to other interested individuals.

(c) Copies of all proposals are available at local Department of Fish and Game offices and on the boards support section's website. When the proposal books are available, the advisory committees and hold public meetings in the communities and regions they represent, to gather local comment on the proposed changes. Finally, the boards convene public meetings, which have lasted as long as six weeks, taking department staff reports, public comment, and advisory committee reports before voting in public session on the proposed changes.

(d) The public has come to rely on this regularly scheduled participatory process as the basis for changing fish and game regulations. Commercial fishermen, processors, guides, trappers, hunters, sport fishermen, subsistence fishermen, and others plan business and recreational ventures around the outcome of these public meetings.

(e) The Boards of Fisheries and Game recognize the importance of public participation in developing management regulations, and recognize that public reliance on the predictability of the normal board process is a critical element in regulatory changes. The boards find that petitions received under (a) of this section can detrimentally circumvent this process and that an adequate and more reasonable opportunity for public participation is provided by regularly scheduled meetings.

(f) The Boards of Fisheries and Game recognize that in rare instances circumstances may require regulatory changes outside the process described in (b) - (d) of this section. It is the policy of the boards that a petition will be denied and not scheduled for hearing unless the problem outlined in the petition justifies a finding of emergency under AS 44.62.250(a). In accordance with state policy expressed in AS 44.62.270, emergencies will be held to a minimum and are rarely found to exist. Except for petitions dealing with subsistence hunting or subsistence fishing, an emergency is an unforeseen, unexpected event that either threatens a fish or game resource, or an unforeseen, unexpected resource situation where a biologically allowable resource harvest would be precluded by delayed regulatory action and such delay would be significantly burdensome to the petitioners because the resource would be unavailable in the future. Petitions dealing with subsistence hunting or subsistence fishing will be evaluated under these criteria:

- (1) the petition must address a fish or game population that has not previously been considered by the board for identification as a population customarily and traditionally used for subsistence under AS 16.05.258; or
- (2) the circumstances of the petition otherwise must require expedited consideration by the board, such as where the proposal is the result of a court decision or is the subject of federal administrative action that might impact state game management authority.

(Eff. 9/22/85, Register 95; am 8/17/91, Register 119; readopt 5/15/93, Register 126; am 2/23/2014, Register 209; am 9/19/2019, Register 231)

Authority: AS 16.05.251, AS 16.05.255, AS 16.05.258

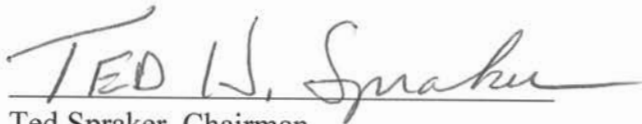
ALASKA JOINT BOARDS OF FISHERIES AND GAME

CRITERIA FOR DEVELOPMENT OF BOARD-GENERATED PROPOSAL

It has been suggested that criteria need to be established to guide the Alaska Joint Boards of Fisheries and Game, Board of Fisheries, and Board of Game (boards) members when deliberating on whether or not to develop a board-generated proposal. The boards will consider the following criteria when deliberating the proposed development and scheduling of a board-generated proposal:

1. Is it in the public's best interest (e.g., access to resource, consistent intent, public process)?
2. Is there urgency in considering the issue (e.g., potential for fish and wildlife objectives not being met or sustainability in question)?
3. Are current processes insufficient to bring the subject to the board's attention (e.g., reconsideration policy, normal cycle proposal submittal, ACRs, petitions)?
4. Will there be reasonable and adequate opportunity for public comment (e.g., how far do affected users have to travel to participate, amount of time for affected users to respond)?

Findings adopted this 16<sup>th</sup> day of October 2013.



Ted Spraker, Chairman  
Alaska Board of Game  
Vote: 6-0



Karl Johnstone, Chairman  
Alaska Board of Fisheries  
Vote: 7-0

**Findings for the Alaska Board of Game**

**2019-225-BOG**

**Board Recommendation to the Department of Fish and Game on  
Subsistence Moose Hunting in Unit 19A Remainder Provided during the  
Southcentral Region Regulations Meeting**

The Board of Game finds as follows, based on information provided by Department staff, Advisory Committees, Alaska residents and other wildlife users:

The Board recommended the department take the following actions:

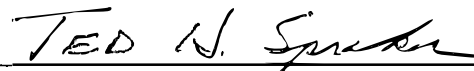
1. Registration permits for moose in the remainder of Unit 19A will be available in person in communities in the hunt area only, during the month of July, and only one permit is allowed per household.
2. A person holding a permit for this hunt may not hold another moose permit in the Kuskokwim River drainage for that regulatory year.
3. 30 permits will be issued the first year. Up to 75 permits may be issued in subsequent years at the department's discretion. In exercising this discretion, the department should consider the harvestable portion of the moose population, the success of hunters in harvesting moose under these permits, and the potential for overhunting that could result in a population decline.
4. If the 2-year average bull:cow ratio decreases below 35:100 the hunt will close until a 2-year average bull:cow ratio is at least 35:100 within the hunt area.
5. If the harvestable portion of the population decreases below the lower range of the amount reasonably necessary for subsistence for 19A, the hunt will close until the harvestable portion reaches the minimum ANS for 19A.
6. No proxy hunting will be permitted for this hunt.

Vote: 5-0-2

*(Members Hoffman and Burnett Absent)*

March 20, 2019

Anchorage, Alaska



Ted Spraker, Chairman

Alaska Board of Game

**Findings of the Alaska Board of Game**  
**2017-222-BOG**  
**Alaska Board of Game Nonresident Hunter Allocation Policy**  
(This policy supersedes BOG policy #2007-173-BOG)

In consideration that Article 8 of the Alaska Constitution states that:

**§ 2. General Authority** — The legislature shall provide for the utilization, development, and conservation of all-natural resources belonging to the state, including land and waters, for the maximum benefit of the people.

**§ 3. Common Use** — Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.

**§ 4. Sustained Yield** — Fish, forests, wildlife, grasslands, and all other replenishable resources belong to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

And, Alaska Statute 16.05.020 states that one of the primary functions of the commissioner of the Department of Fish and Game is to:

(2) manage, protect, maintain, improve, and extend the fish, game, and aquatic plant resources of the state in the interest of the economy and general well-being of the state.

And further, that; AS16.05.255 directs that the Board of Game, among other duties, may adopt regulations for:

(10) regulating sport hunting and subsistence hunting as needed for the conservation, development, and utilization of game.

(13) promoting hunting and trapping and preserving the heritage of hunting and trapping in the state.

The Alaska Board of Game establishes this document as a general statement of its views related to nonresident hunter participation in the State of Alaska.

The Alaska Board of Game finds that:

1. Carefully controlled hunting and trapping have been used since statehood to assure that Alaska's wildlife populations are healthy and sustainably managed. Alaska's wildlife populations are minimally impacted by the hunting pressure experienced today, and most hunted populations are either stable or growing. There are few remaining opportunities in North America where a hunter can experience both the quality of largely uninhabited and undeveloped environment, minimal private land ownership boundaries, or the type of hunting opportunities that Alaska has to offer. Alaska is the

only place in the United States where coastal brown bears, caribou and Dall sheep can be hunted, for instance, and there has been great demand for hunting opportunities of these species by U.S. and foreign citizens for many generations.

2. Alaska is one of the last remaining places in the United States where there are large segments of public lands open for general season hunting opportunities. The State of Alaska maintains authority for wildlife management across multiple land ownership designations yet the board recognizes that approximately 60% of the state remains in Federal ownership and is managed for the benefit of all U.S. citizens equally. In recognition of our state's constitutional mandate to manage the state's wildlife for the "common use" and "maximum benefit" of the people, the board has maintained a resident priority for hunting opportunities through management actions such as longer seasons, less restrictive antler requirements, resident tag fee exemptions, and lower licensing fees. The board has also maintained general season opportunity to the greatest degree possible for the benefit of all hunters, resident and visitor alike.
3. Under the Common Use Clause of the Alaska Constitution, access to natural resources by any person's preferred method or means is not guaranteed, and protecting public access to those resources requires an adaptive and informed balancing of demands and needs consistent with the public interest. As such, the state has considerable latitude to responsibly, equitably, and sustainably establish priorities among competing uses for the maximum benefit of the public.
4. From region to region, Alaska often has differing patterns of use, values, and traditions related to the harvest of game. Some areas welcome nonlocal hunters more readily than others, and other areas have little concern regarding who else is hunting the area, so long as local needs are met. The board has recognized that there is no single simple allocation formula that adequately covers the needs, desires, and historical use patterns of the diverse regions of our state.
5. Nonresident hunters have played a crucial and often undervalued role in support of Alaska's wildlife conservation efforts since Territorial times. Early in the last century, nonresident hunters partnered with Alaskan sportsmen to advocate for the conservation of brown bear and grizzly populations, perhaps most notably on Kodiak Island, which reversed territorial, and later state policy that was at one point directed toward the complete elimination of some segments of these populations by any means available. Nonresident hunting groups and resident hunters successfully advocated for the creation of McKinley National Park to address market hunting depletions of Dall sheep populations in that region, and later played an important role in advocating that National Park Preserves and National Wildlife Refuges in Alaska would not only allow for hunting, in the Alaska National Interest Lands Conservation Act, but that hunting and fishing would be recognized in law as priority uses under the National Wildlife Refuge System Improvement Act of 1997. These cooperative actions substantially protected continued hunting opportunities across large areas of federally managed lands in Alaska. More recently, nonresident hunters have contributed meaningfully in the

effort to prevent disease introduction in Alaska, and continue to be knowledgeable allies in safeguarding both our resources and our access to these resources in the face of external pressures.

6. Nonresident hunters typically harvest wildlife at low levels across the state, with few known exceptions. While most big game animal populations are typically harvested at a rate of less than 10 percent by nonresidents, there are some areas where it can be higher (e.g. nonresident sheep harvests averages between 35 and 40% annually and brown/grizzly bear harvests typically exceed resident harvest in much of the state.
  - The board recognizes that, in recent years, there has been a renewed effort to restrict or eliminate nonresident hunter opportunity, especially in relation to Dall sheep harvest. The board conducted an extensive survey of sheep hunter perceptions and experiences; requested that the Alaska Department of Fish and Game gather all known data regarding hunter participation and harvest rates statewide; and, convened a Dall sheep working group made up of Alaskan residents to discuss the known data, survey results, and issues more broadly in an open setting.
  - Nonresident hunter numbers are restrained due to many factors, such as the guide requirement for Dall sheep, mountain goat and brown bear/grizzly, a law primarily addressing hunter safety issues. This requirement also results in higher success rates due to the greater experience and area familiarity of hunting guides. Nonresident sheep hunters have also been limited by federal guide concessions, which have capped the number of guides in large portions of sheep ranges and held them to predetermined numbers on 10-year cycles. The competitive bidding nature for obtaining rights in these areas requires that guides hold to the number of clients they have proposed during their tenure, allowing for predictable participation and anticipated harvest rates.
7. Despite comparatively low participation and harvest rates for most species due to restricted opportunity, nonresident hunters provide the majority of direct funding into Alaskan wildlife management programs through relatively expensive license and big game tag fees. This level of funding has allowed for stable wildlife management and educational activities for decades. The additional benefit to wildlife management from receiving Pittman-Robertson matching funds, which come primarily from nationwide weapon purchases, cannot be overstated. The level of funding that nonresident license sales have provided for department survey and inventory programs, among other programs, has allowed the board to have increased confidence in providing for higher levels of harvest opportunities under sustained yield principles. Alaskan hunters have benefited most from these management programs through generally avoiding harvest quotas, draw permits, antler restrictions, and shortened seasons for the majority of hunt opportunities in Alaska. This enhances our ability to satisfy our legal mandate to manage, preserve and promote hunting and trapping throughout the state, while

providing the maximum benefit for all the people as Alaskans take home an estimated 90% of the big game animals harvested for their meat value in the state each year.

8. Nonresident hunters contribute substantially directly to the Alaskan economy through contracting with service providers, equipment rentals, supply purchases from local vendors, hotel and tourism related expenses, and meat processing and trophy expediting services. Visiting nonresident hunters are typically comprised of 80% of unguided hunters, 20% guided nonresident hunters, or hunters accompanied by second degree of kindred relatives.

- Unguided nonresident hunters often contract with air-taxis or transporters for transportation services to remote hunting locations and primarily focus their efforts on moose, caribou, deer, and black bear. Nonresident hunter dispersal through transportation services provides benefit to both resident hunters who find the more accessible hunting areas less crowded, and nonresident hunters who often have access to more remote areas that provide unique hunting settings or access to migratory resources. Unguided nonresident hunters often donate meat through their service providers to remote villages, especially portions of their moose and caribou, due to prohibitive transportation costs. There have been numerous complaints over the years related to donated meat quality, hunter crowding, overbooked services, and competition with local hunters related to air-taxi and transporter operations – resulting in the creation of controlled use areas to limit hunting-related aircraft use in several areas of the state and most recently both modified state and new federal controlled use areas in northwest Alaska. The board recognizes that these issues are not typically driven by lack of resource availability, but at times due to variance in wildlife migrations or weather and at other times unchecked competition for limited access points by multiple service providers. The board believes that these conflicts can be best addressed through greater oversight of transportation related services in our state rather than strictly limiting general hunting opportunity where resources are in many cases stable or abundant.
- Approximately 86% of registered or master guides in Alaska are Alaskan residents and upwards of 66% of assistant guides are Alaskan residents. Guided hunt opportunity is generally disbursed across the state on both state and federal lands, and to a lesser degree on private lands. A recent economic analysis of the economic impact of the guide industry notes that 3,242 guided nonresident hunters contributed approximately 87.2 million dollars to Alaska's economy in 2015, and supported 2,120 Alaskan jobs. A significant amount of game meat was donated by guided hunters in communities across the state during this same period, providing both economic relief and direct dietary benefit to mostly rural Alaskans. The benefit this brings to Alaskan communities is supported by testimony from across Alaska. There has been complaint regarding hunter crowding or competition for Dall sheep resources on state owned lands in several regions for a number of years and the board

has recently taken a very detailed look at these and other issues with the aid of a resident-comprised Dall sheep working group, as noted above. The board has advocated for the restoration of guide-concessions on state lands to both provide a comprehensive program to address quality of hunt issues such as these, and to assure that stewardship-based guided-hunt opportunities are provided in these areas.

- Recent data and testimony indicate that the trend of nonresident hunters accompanied by second degree kindred resident relatives for Dall sheep, brown bear, and mountain goat appear to be increasing. The board recognizes the high value of continued opportunity for Alaskans to share unique hunting opportunities with nonresident family members. The board has heard complaints that, in portions of the state, strictly limited permit opportunities for nonresident guide-required hunts have at times been taken to a large degree by second degree kindred hunters accompanied by resident relatives, an effect unanticipated when allocations were established. The board desires to address these issues in a manner that both protects the careful allocation frameworks that the board has already anticipated and determined as appropriate, and provide continued or expanded opportunity for Alaskans to maintain family centered hunting traditions with nonresident relatives where possible.

The primary goals and efforts of the Alaska Board of Game are directed toward the management of stable and healthy wildlife populations capable of producing harvestable surpluses to provide for a variety of uses and, at times, differing values of the public. While many uses of wildlife do not directly conflict with one another, such as wildlife viewing and hunting, with some notable exceptions, some consumptive uses do require thoughtful allocation decisions. Historically, the board has viewed meeting the subsistence needs of the Alaskan populace as its primary goal, as directed by state law.

Preferences have been granted by the state in the following order:

- 1) Alaskan Resident subsistence hunting - for all species with a customary or traditional use classification
- 2) Alaskan Resident general season hunting – for moose, deer, caribou, elk
  - Residents have longer seasons, more liberal bag limit and antler restrictions, and lower license and tag fees
- 3) Resident and Nonresident general season hunting – for Dall sheep, brown/grizzly bear, and mountain goat. Typically managed for trophy-related values.
  - Guide-required species for nonresidents can be a limiting (financial) factor for many nonresident hunters, in addition to license and tag fees
- 4) Nonresident Alien hunting – same as nonresident hunting
  - Guide-required for all big game species and with higher license and tag fees



The Alaska Board of Game has recognized the above inherent preferences and general practices that benefit Alaskan hunters and will continue to do so. In addition, the board will address allocation issues in the following circumstances, if season and/or method and means adjustments are deemed insufficient:

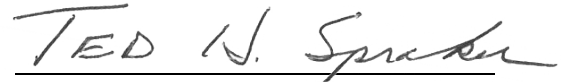
- 1) When there is suitable harvestable surplus - it is the board's policy to allow maximum opportunity for all hunters, within the bounds of sustained yield management practices, regardless of residency.
- 2) In times of non-hunting-related population decline - it will be the board's policy to restrict all non-subsistence hunting if it is predicted to contribute to the decline or have the potential to slow the recovery of these populations appreciably. Nonresident hunters will be restricted first in these circumstances, unless their portion of the overall harvest is deemed insignificant.
- 3) In times of hunting-related population decline – it will be the board's policy to identify the potential causes and address each case individually. Nonresident hunters will be restricted first in these circumstances, unless their portion of the overall harvest is deemed insignificant or the restriction of nonresident hunters does not address the primary cause of decline.
- 4) Nonresident hunting will not be authorized for any moose, caribou or deer population under a current intensive management predator control program until the minimum intensive management population or harvest objectives are met unless the board determines that such hunting will not adversely impact resident opportunity, will not adversely impact the recovery of the target population, and is determined to provide for the maximum benefit of the people of Alaska.
- 5) The board may choose to address areas of conservation, hunter overcrowding, or conflict issues by placing limitations on or between commercial service-dependent hunts, or request that the appropriate regulatory body address the service provider issue if it is beyond the board's authority. This may be accomplished by guided-only or non-guided-only permit stipulations for any species, as the board has done in several places in the past. Sustained yield will be the first test in these circumstances, then subsistence obligations, historical use patterns, and quality of hunt experience will be considered.
- 6) When a draw hunt is deemed necessary, allocation will be determined on a case by case basis and will be based upon the historical data of nonresident and resident permit, harvest or participation allocation over the past ten or more years. When a guided nonresident hunter applies for a drawing permit, proof of having a signed guide-client contract is required and contracting guides shall be registered in the area prior to the drawing. When a guide signs a guide-client contract, the guide is providing guiding services and therefore must be registered for the use area at that time.

- 7) The board has supported the reestablishment of state-managed guide concessions to address user conflicts and hunt quality issues for more than a decade. The board continues to support this avenue to address known conflict areas. It will be the board's policy to address nonresident allocations under state or federal concessions that have overlaying draw requirements in a manner that cooperates with land management efforts and goals, as deemed appropriate by the board.

Vote: 5-1-1

Adopted: November 17, 2017

Anchorage, Alaska

Handwritten signature of Ted Spraker in black ink.

Ted Spraker, Chairman

Alaska Board of Game

**Findings of the Alaska Board of Game  
2016-215-BOG  
BOARD OF GAME WOLF MANAGEMENT POLICY  
(Policy duration: Date of finding through June 30, 2021.  
This policy supersedes BOG policy 185-2011-BOG)**

Background and Purpose

Alaskans are proud that wolves occur throughout their historic range in Alaska. Wolves are important to people for a variety of reasons, including as furbearers, big game animals, competitors for ungulate prey animals, and as subjects of enjoyment, curiosity, and study. Wolves are important components in the natural functioning of northern ecosystems. Over time, many people have come to appreciate wolves as exciting large carnivores that contribute significantly to the quality and enjoyment of life in Alaska.

The primary purpose of this policy is to provide guidance to the public, the Department, and the Board of Game on wolf management issues as the Board and the Department implement constitutional and statutory direction and respond to public demands and expectations. The Board recognizes the need for ongoing responsible wolf management to maintain sustainable wolf populations and harvests, and to help maintain sustainable ungulate populations upon which wolves are largely dependent. The Board also recognizes that when conflicts arise between humans and wolves over the use of prey, wolf populations may have to be managed more intensively to minimize such conflicts and comply with existing statutes (e.g. AS 16.05.255). Under some conditions, it may be necessary to greatly reduce wolf numbers to aid recovery of low prey populations or to arrest undesirable reductions in prey populations. In some other areas, including national park lands, the Board also recognizes that non-consumptive uses of wolves may be considered a priority use. With proper management, non-consumptive and consumptive uses are in most cases compatible but the Board may occasionally have to restrict consumptive uses where conflicts among uses are frequent.

Wolf/Human Use Conflicts

Conflicts may exist between wolves and humans when priority human uses of prey animals cannot be reasonably satisfied. In such situations, wolf population control will be considered. Specific circumstances where conflicts arise include the following:

1. Prey populations or recruitment of calves into populations are not sufficient to support existing levels of existing wolf predation and human harvest;
2. Prey populations are declining because of predation by wolves or predation by wolves in combination with other predators;
3. Prey population objectives are not being attained; and
4. Human harvest objectives are not being attained.

Wolf Management and Wolf Control

The Board and the Department have always distinguished between wolf management and wolf control. Wolf management involves managing seasons and bag limits to provide for general public hunting and

trapping opportunities. These seasons provide for both subsistence and other traditional economic harvest opportunities and, as a side benefit, allow for participants to directly aid in mitigating conflicts between wolves and humans or improving ungulate harvest levels. In most cases trapping seasons will be kept to times when wolf hides are prime. However, some hunters are satisfied to take wolves during off-prime months including August, September, April, and May. Opportunity may be allowed for such harvest.

Wolf control is the planned, systematic regulation of wolf numbers to achieve a temporarily lowered population level using aerial shooting, hiring trappers, denning, helicopter support, or other methods which may not normally be allowed in conventional public hunting and trapping. The purpose of wolf control is not to eradicate wolf populations. Under no circumstances will wolf populations be eliminated or reduced to a level where they will not be able to recover when control efforts are terminated, and wolves will always be managed to provide for sustained yield.

In some circumstances it may be necessary to temporarily remove a high percentage (>70%) of wolf populations to allow recovery of prey populations. In other situations, it may be necessary to temporarily remove a smaller percentage of wolf populations (40-70%) to allow prey populations to increase or meet human harvest objectives. Once prey population objectives have been met, wolf populations will generally be allowed to increase to or above pre-control levels.

During the 1997 review of predator control in Alaska by the National Research Council of the National Academy of Sciences (National Research Council 1997), only two clearly successful cases were found where increased harvests of ungulates resulted from control in the Yukon and Alaska. In the last 13 years since that review, several other programs have been successful, including programs in GMUs 9, 13, 16 and 19. In addition, there is now a thirty year history of intensive wolf and moose management and research, including 2 periods of wolf control in GMU 20A. It is clear, and well documented, that periodic wolf control has resulted in much higher harvests of moose than could be realized without control (Boertje et al., 2009). Biologists now have considerable experience successfully managing moose at relatively high density (Boertje et al., 2007). The GMU 20A case history has provided a great deal of information on what biologists can expect from intensive management programs and these programs are scientifically well founded. However, GMUs are different ecologically and new information on which areas are best suited to intensive management programs will continue to be gathered.

#### Decisions by the Board to Undertake Wolf Control

Generally, there are two situations under which the Board will consider undertaking wolf control (implementing extraordinary measures outside normal hunting and trapping). In rare cases, control may be implemented where sustained yield harvests of ungulates cannot be maintained or where extirpation of ungulate populations may be expected. More commonly, the Board may implement wolf control to comply with Alaska Statutes (AS 16.05.255) where ungulate populations are declared “depleted” or where ungulate harvests must be significantly reduced and these populations have been found by the Board to be important for “high levels of human harvest”. In most cases when wolf control is implemented, the Board will favor and promote an effective control effort by the public. Experience has shown that often a joint effort by the public and the Department has been most effective. However, the Board recognizes that there are areas and situations where the public cannot effectively or efficiently control predation and that the Department may, under its own authority and responsibilities, conduct the necessary wolf population control activities. Such situations arise in part because public effort to take wolves tends to diminish

before an adequate level of population control is achieved. In areas where wolf reduction is being conducted, ungulate and wolf surveys should be conducted as frequently as necessary to ensure that adequate data are available to make management decisions and to ensure that wolf numbers remain sufficient to maintain long-term sustained yield harvests.

#### Methods the Board Will Consider When Implementing Wolf Control Programs

- 1) Expanding public hunting and trapping into seasons when wolf hides are not prime.
- 2) Use of baiting for hunting wolves.
- 3) Allowing same-day-airborne hunting of wolves when 300 ft from aircraft.
- 4) Allowing land-and-shoot by the public.
- 5) Allowing aerial shooting by the public.
- 6) Allowing use of Department staff and helicopters for aerial shooting.
- 7) Encouraging the Department to hire or contract with wolf trappers and other agents who may use one or more of the methods listed here.
- 8) Allowing denning by Department staff and use of gas for euthanasia of sub-adults in dens.

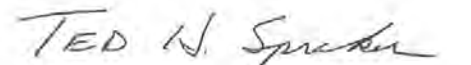
#### Terminating Wolf Control

Depending on the response to wolf control and ungulate population and harvest objectives, control may either be of short or long duration. In some cases, control may last less than five years. In other cases it may be an ongoing effort lasting many years. As ungulate harvest objectives are met, the Board will transition from a wolf control program to a wolf management program, relying to a greater extent on public hunting and trapping. In cases where ungulates respond very well and hunting is ineffective at controlling ungulate numbers for practical reasons, it may be necessary for the Board to restrict the taking of predators.

#### References Cited

- Boertje, Rodney D.; Valkenburg, Patrick, and McNay, Mark E. 1996. Increases in moose, caribou, and wolves following wolf control in Alaska. *Journal of wildlife management*. 1996; 60(3):474-489.
- Boertje, R. D., K. K. Kellie, C. T. Seaton, M. A. Keech, D. D. Young, B. W. Dale, L. G. Adams, A. R. Aderman. 2007. Ranking Alaska moose nutrition: signals to begin liberal antlerless moose harvests. *Journal of Wildlife Management* 71(5): 1494-1506.
- Boertje, R. D., M. A. Keech, D. D. Young, K. A. Kellie, and C. T. Seaton. 2009. Managing for elevated yields of moose in Alaska. *Journal of Wildlife Management* 73 (3): 314-327.
- National Research Council. 1997. *Wolves, bears, and their prey in Alaska*. National Academy Press, Wash., D.C.

Vote: 7-0  
March 17, 2016  
Fairbanks, Alaska

  
Ted Spraker, Chairman  
Alaska Board of Game

**Findings of the Alaska Board of Game  
2016-214-BOG  
BOARD OF GAME BEAR CONSERVATION, HARVEST,  
AND MANAGEMENT POLICY  
Expiration Date: June 30, 2021**

**Purposes of Policy**

1. To clarify the intent of the Board and provide guidelines for Board members and the Department of Fish and Game to consider when developing regulation proposals for the conservation and harvest of bears in Alaska, consistent with the Alaska Constitution and applicable statutes.
2. To encourage review, comment, and interagency coordination for bear management activities.

**Goals**

1. To ensure the conservation of bears throughout their historic range in Alaska.
2. To recognize the ecological and economic importance of bears while providing for their management as trophy, food, predatory, and furbearer species.
3. To recognize the importance of bears for viewing, photography, research, and non-consumptive uses in Alaska.

**Background**

The wild character of Alaska's landscapes is one of our most important natural resources and the presence of naturally abundant populations of brown/grizzly bears (*Ursus arctos*) and black bears (*Ursus americanus*) throughout their historic range in Alaska is important to that wild character. Bears are important to Alaskans in many ways, including as food animals, predators of moose, caribou, deer and muskox, trophy species for nonresident and resident hunters, furbearers, problem animals in rural and urban settings, and as objects of curiosity, study, awe, and enjoyment. Bears are also important components of naturally functioning Alaskan ecosystems.

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. In most areas, hunting and viewing are compatible uses but the Board may consider bear viewing as a priority use in some small areas, especially where access for people is good and bears are particularly concentrated. The Board and the Department will continue to discourage people from feeding bears to provide viewing opportunities.

Bears are frequently attracted to garbage or to fish and hunting camps, and can be a nuisance where they become habituated to humans and human food sources. Dealing with problem bears has been especially difficult in Anchorage, Juneau, and the Kenai Peninsula. The department has worked hard, and successfully, with municipalities to educate people and solve waste management

problems. The department's policy on human food and solid waste management (<http://www.wc.adfg.state.ak.us/index.cfm?adfg=bears.bearpolicy>) provides guidance on reducing threats to humans and the resulting need to kill problem bears.

Bears can pose a threat to humans in certain situations. Statewide, an average of about six bear encounters a year result in injuries to people. Most attacks now occur in suburban areas and do not involve hunters. About every two or three years, one of the attacks results in a human fatality. The Department and the Board will continue to educate people about ways to minimize threats to humans and the resulting need to kill problem bears.

Alaska is world-renowned as a place to hunt brown bears, grizzly bears and black bears. Alaska is the only place in the United States where brown and grizzly bears are hunted in large numbers. An average of about 1,500 brown and grizzly bears is harvested each year. The trend has been increasing, probably because of both increased demand for bear hunting and increasing bear numbers. 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. Throughout much of Interior Alaska and in some areas of Southcentral Alaska, the combined predation by bears and wolves keeps moose at relatively low levels. Bear predation on young calves has been shown to contribute significantly to keeping moose populations depressed, delayed population recovery, and low harvest by humans. People in parts of rural Alaska (e.g. Yukon Flats) have expressed considerable frustration with low moose numbers and high predation rates on moose calves in hunting areas around villages. The Board and the Department have begun to take a more active role in addressing bear management issues. Because the Constitution of the State of Alaska requires all wildlife (including predators) to be managed on a sustained yield basis, the Board of Game and the Department will manage all bear populations to maintain a sustained yield, but the Board recognizes its broad latitude to manage predators including bears to provide for higher yields of ungulates (*West vs State of Alaska*, Alaska Supreme Court, 6 August 2010).

### **Brown and grizzly bears**

Although there is no clear taxonomic difference between brown and grizzly bears, there are ecological and economic differences that are recognized by the Board and Department. In the area south of a line following the crest of the Alaska Range from the Canadian border westward to the 62<sup>nd</sup> parallel of latitude to the Bering Sea, where salmon are important in the diet of *Ursus arctos*, these bears are commonly referred to as brown bears. Brown bears grow relatively large, tend to be less predatory on ungulates, usually occur at high densities, and are highly sought after as trophy species and for viewing and photography. Bears found north of this line in Interior and Arctic Alaska; where densities are lower and which are smaller in size, more predatory on ungulates, and have fewer opportunities to feed on salmon; are referred to as grizzly bears. Brown and grizzly bears are found throughout their historic range in Alaska and may have expanded their recent historic range in the last few decades into places like the Yukon Flats and lower Koyukuk River.

Although determining precise population size is not possible with techniques currently available, most bear populations are estimated to be stable or increasing based on aerial counts, Capture-Mark-Resight techniques (including DNA), harvest data, traditional knowledge, and evidence of expansion of historic ranges. Throughout most coastal habitats where salmon are abundant, brown bears are abundant and 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>). Mean densities as low as 4 grizzly bears/1,000 km<sup>2</sup> (12 bears/1,000 mi<sup>2</sup>) have been measured in the eastern Brooks Range but these density estimates may be biased low and the confidence intervals around the estimates are unknown. Extrapolations from existing density estimates yielded statewide estimate of 31,700 brown bears in 1993, but the estimate is likely to be low.

Although some northern grizzly bear populations have relatively low reproductive rates, most grizzly bear and brown bear populations are capable of sustaining relatively high harvest rates comparable to moose, caribou, sheep, goats, and other big game animals that exist in the presence of natural numbers of large predators in most areas of Alaska. In addition, grizzly bears and brown bears have shown their ability to recover relatively quickly (<15 years) from federal poisoning campaigns during the 1950s and overharvest on the Alaska Peninsula during the 1960s. Biologists were previously concerned about the conservation of brown bears on the Kenai Peninsula and brown bears there were listed by the state as a “species of special concern”. The Department implemented a conservation strategy there through a stakeholder process. In recent years it has become apparent that brown bears remain healthy on the Kenai and the Board and the Department no longer believes there is a conservation concern.

In some areas of the state (e.g. Unit 13) where the Board has tried to reduce grizzly bear numbers with liberal seasons and bag limits for over 15 years, there is no evidence that current increased harvests have affected bear numbers, age structure, or population composition. In areas of Interior Alaska, where access is relatively poor, long conventional hunting seasons and bag limits of up to 2 bears per year have not been effective at reducing numbers of grizzly bears. In these areas, most biologists believe that as long as sows and cubs are protected from harvest it will not be possible to reduce populations enough to achieve increases in recruitment of moose.

### **Black bears**

American black bears (*Ursus americanus*) are generally found in forested habitats throughout the state. Like brown and grizzly bears, black bears also occupy all of their historic ranges in Alaska and are frequently sympatric with grizzly and brown bears. Because they live in forested habitats it is 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>).

In most areas of the state, black bears are viewed primarily as food animals, but they are also important as trophy animals, predators of moose calves, and for their fur. The Board recently classified black bears as furbearers, recognizing the desire of people to use black bear fur as trim



on clothing, to enhance the value of black bears, and to enable the Board and the Department to use foot-snares in bear management programs. The classification of black bears as a furbearer has legalized the sale of some black bear hides and parts (except gall bladders), and has thus made regulations in Alaska similar to those in northern Canada in this regard.

Black bears exhibit higher reproductive rates than brown and grizzly bears. In all areas of the state black bear populations are healthy and can sustain current or increased harvest levels. However, hunting pressure on black bears in some coastal areas like Game Management Unit (GMU) 6 (Prince William Sound), GMU 2 (Prince of Wales Island) and parts of GMU 3 (Kuiu Island) may be approaching or have exceeded maximum desired levels if trophy quality of bears is to be preserved, and are the subjects of frequent regulatory adjustments.

In some other parts of the state, deliberately reducing black bear numbers to improve moose calf survival has proven to be difficult or impossible with conventional harvest programs. The Board has had to resort to more innovative regulations promoting baiting and trapping with foot snares. The Department has also tried an experimental solution of translocating bears away from an important moose population near McGrath (GMU 19D) to determine if reduced bear numbers could result in significant increases in moose numbers and harvests. The success of the McGrath program has made it a potential model for other small areas around villages in Interior Alaska, if acceptable relocation sites are available.

### **Guiding Principles**

**The Board of Game and the Department will promote regulations and policies that will strive to:**

1. Manage bear populations to provide for continuing sustained yield, while allowing a wide range of human uses in all areas of the state.
2. Continue and, if appropriate, increase research on the management of bears and on predator/prey relationships and methods to mitigate the high predation rates of bears on moose calves in areas designated for intensive management.
3. Continue to provide for and encourage non-consumptive use of bears without causing bears to become habituated to human food.
4. Favor conventional hunting seasons and bag limits to manage bear numbers.
5. Encourage the human use of bear meat as food.
6. Employ more efficient harvest strategies, if necessary, when bear populations need to be substantially reduced to mitigate conflicts between bears and people.
7. Primarily manage most brown bear populations to maintain trophy quality, especially in Game Managements 1 through 6, and 8 through 10.
8. Work with the Department to develop innovative ways of increasing bear harvests if conventional hunting seasons and bag limits are not effective at reducing bear numbers to mitigate predation on ungulates or to deal with problem bears.
9. Simplify hunting regulations for bears, and increase opportunity for incidental harvest of grizzly bears in Interior Alaska by eliminating resident tag fees.

10. Recognize the increasing value of brown bears as a trophy species and generate increased revenue from sales of brown bear tags.
11. Review and recommend revision to this policy as needed.

### **Conservation and Management Policy**

The Board and the Department will manage bears differently in different areas of the state, in accordance with ecological differences and the needs and desires of humans. Bears will always be managed on a sustained yield basis. In some areas, such as the Kodiak Archipelago, portions of Southeast Alaska and the Alaska Peninsula, brown bears will generally be managed for trophy-hunting and viewing opportunities. In Southeast Alaska and Prince William Sound, black bears will generally be managed as a trophy species, food animals, or for viewing opportunities. In Interior and Arctic Alaska, black bears and grizzly bears will be managed primarily as trophy animals, food animals, and predators of moose and caribou. However in some parts of Interior Alaska, the Board may elect to manage populations of black bears primarily as furbearers.

#### **Monitoring Harvest and Population Size**

The Board and the Department recognize the importance of monitoring the size and health of bear populations on all lands in Alaska to determine if bear population management and conservation goals are being met. In areas where monitoring bear numbers, population composition, and trophy quality is a high priority, sealing of all bear hides and skulls will be required. At the present time, all brown and grizzly bears harvested under the general hunting regulations must be inspected and sealed by a Department representative. Where monitoring bear numbers and harvests is a lower priority, harvest may be monitored using harvest tickets or subsistence harvest surveys.

Harvest of black bears will generally be monitored either with harvest tickets or sealing requirements. Where harvests are near maximum sustainable levels or where the Department and the Board need detailed harvest data, sealing will be required.

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.

Bear viewing also is an important aspect of bear management in Alaska. Increasing interest in watching bears at concentrated feeding areas such as salmon streams and sedge flats, and clam flats is challenging managers to find appropriate levels and types of human and bear interactions without jeopardizing human safety. Bear hunting and viewing are compatible in most situations.

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.

#### **Managing Predation by Bears**

In order to comply with the AS 16.05.255 the Board and Department may implement management actions to reduce bear predation on ungulate populations. The Board may elect to work with the

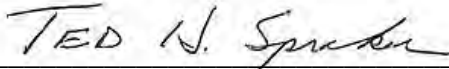
Department to remove individual problem bears or temporarily reduce bear populations in Game Management Units, Subunits, or management areas. The Board and the Department may also need to reduce bear predation on ungulates to provide for continued sustained yield management or conservation of ungulates. In addition, it may be necessary for the Department to kill problem bears to protect the safety of the public under AS 16.05.050 (a) (5). In some cases the Board may direct the Department to prepare a Predation Control Areas Implementation Plan (5 AAC 92.125 or 92.126) or in other cases the Board may authorize extensions of conventional hunting seasons, or implement trapping seasons to aid in managing predation on ungulates.

To comply with AS 16.05.255 to maintain sustained yield management of wildlife populations, or to prevent populations of ungulates from declining to low levels, the Board may selectively consider changes to regulations allowing the public to take bears, including allowing the following:

- Baiting of bears
- Trapping, using foot-snares, for bears under bear management or predator control programs.
- Incidental takes of brown or grizzly bears during black bear management or predator control programs.
- Use of communications equipment between hunters or trappers.
- Sale of hides and skulls as incentives for taking bears.
- Diversionary feeding of bears during ungulate calving seasons.
- Use of black bears for handicraft items for sale, except gall bladders.
- Use of grizzly bears for handicraft items for sale, except gall bladders.
- Taking of sows accompanied by cubs and cubs.
- Same-day-airborne taking.
- Aerial shooting of bears by department staff
- Suspension or repeal of bear tag fees.
- Use of helicopters.

The Board intends that with the exception of baiting, the above-listed methods and means will be authorized primarily in situations that require active control of bear populations, and only for the minimum amount of time necessary to accomplish management objectives. The Board allows baiting of black bears as a normal method of take in broad areas of the state, and will consider allowing brown bear baiting as a normal method of take in select areas.

Vote: 7-0  
March 17, 2016  
Anchorage, Alaska

  
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Ted Spraker, Chairman  
Alaska Board of Game

**Alaska Board of Game  
2016-213-BOG  
Findings Related to Proposal 207: Restrictions on the  
Use of Aircraft Associated with Sheep Hunting**

To address complaints concerning misuse of aircraft, particularly during sheep hunting season, the Board of Game drafted a proposal to limit aircraft use associated with sheep hunting, later identified as proposal 207. This proposal was deliberated on during the January 8, 2015 Work Session Meeting held in Juneau, where the Board agreed to schedule the proposal to be addressed at the February 2015, Central/SW Regional meeting in Wasilla. The Board also held an evening “town hall” style meeting in February where approximately 165 people participated in a discussion concerning the use of aircraft during sheep season.

Recognizing there was opposition from those using aircraft and support from hunters that did not use aircraft, the Board deferred the proposal to the March 2015, Southcentral Region Meeting held in Anchorage to facilitate additional public comment. Proposal 207 was approved at this meeting with six members in support and one opposed, following a lengthy public testimony process.

A special meeting was then held on April 24, 2015 for the purpose of scheduling a future meeting to rescind the action taken by the Board on proposal 207, at the request of two Board members. A special meeting was held on May 28, 2015 to discuss the merits of retaining proposal 207. The request to rescind failed; with a vote of two supporting rescinding and five supporting the proposal.

The adopted language now reads: 5 AAC 92.085. **Unlawful methods of taking big game; exceptions....(8) a person who has been airborne may not take or assist in taking a big game animal until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep.**

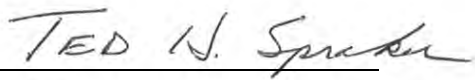
The purpose of this finding is to clarify the Board’s intent when adopting this restriction and address some of the commonly heard misinterpretations brought to Board members’ attention since the regulation became effective July 1, 2015.

Passage of proposal 207 is intended to:

1. Specifically address public complaint that the Board of Game has heard for many decades regarding the controversial practice of hunting for wildlife from aircraft.
  - Since at least the 1970’s the Board of game has heard testimony regarding how hunting from an aircraft has both disrupted the efforts of other hunters through displacement of animals and also lowered the quality of experience for other hunters who do not use aircraft as a hunting tool.

- The Board recognizes that there has been increased complaint especially during the last decade regarding perceived crowding issues and increased competition among Dall sheep hunters in their efforts, despite less hunter participation than in previous decades, and that the practice of aircraft hunting may be contributing to these problems by disturbing both hunters and sheep populations themselves.
  - Technological advances in small aircraft capability and the increasing popularity of short field performance educational videos have combined in recent decades, resulting both in increased aircraft dependent hunting methods and decreased number of areas where foot based hunters are able to go without competition from those who primarily hunt from the air and then land nearby in marginal conditions to pursue the sheep.
2. Prohibit the deliberate use of an aircraft for locating any Dall sheep for hunting purposes between August 10 and September 20. This precludes flying with the intention to generally locate Dall sheep and also making single or repeated passes to evaluate the location, type, or quality of specific animals. This prohibition is intended to apply to both the pilot and anyone that this information is communicated to during the open season, who has the intent to harvest a Dall sheep anywhere in the state.
- The prohibition is not meant to prevent the hunting of animals that were incidentally spotted while under the allowed provisions of this regulation (... **“to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep”**.) so long as the aircraft is not being used for the purpose of locating Dall sheep for hunting purposes. **“From August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season.**
  - This prohibition was not intended to prohibit the hunting of Dall sheep in the present season, or following seasons, if the sheep were incidentally spotted by a pilot or passenger who are directly in route to or from a proposed camp or hunter drop-off or pick-up location, an existing camp or cache, or Dall sheep harvest location between the August 10 and September 20 hunting season.
  - This prohibition does not preclude someone from legally harvesting any Dall sheep if it were incidentally spotted while directly in route to or from a proposed landing location.
  - This prohibition does not intend to prevent any flight maneuvers that are necessary to make an informed and safe landing in the field.

Adopted: March 17, 2016  
Vote: 4-2-1  
Fairbanks, Alaska


  
Ted Spraker, Chairman  
Alaska Board of Game

**Findings for the Alaska Board of Game**  
**2012-196-BOG**  
**Unit 19A Intensive Management Supplemental Findings**  
**March 9, 2012**

The Board of Game finds as follows, based on information provided by Department staff and residents and users of moose in Unit 19A. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Unit 19A predation control implementation plan in 5 AAC 92.125, and in Board of Game supplemental Findings 2009-180-BOG.

1. The moose population size, currently estimated to be 2,791-5,782 moose, is less than the population objective of 7,600-9,300 moose (derived from the combined Units 19A and 19B objective based on proportionate area). The population objective has not been achieved for at least the last 8 years.
2. The Unit 19A moose harvestable surplus, as described in 5 AAC 92.106(3)(A), in eastern Unit 19A (upstream from and excluding the George River drainage), excluding the Lime Village Management Area is nonexistent. In western Unit 19A (downstream from and including the George River drainage), the harvestable surplus is 60 bulls. This is less than the harvest objective of 400-550 moose (also based on proportionate area). The harvest objective has not been achieved for at least the last 8 years.
3. The Unit 19A moose population is depleted and reduced in productivity resulting in a significant reduction in the allowable human harvest of the population.
4. Enhancement of abundance or productivity is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
5. The Board has repeatedly, since 2002, been required to significantly reduce the taking of moose in Unit 19A by restricting harvest, seasons and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.
6. The population and harvest objectives have not been achieved, at least in part, because wolf, black bear, and brown bear predation has been an important cause of mortality in the population, to the extent that the population is unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.
7. The Department may reduce the black bear and brown bear populations using department employees to conduct aerial, land and shoot, and/or ground based lethal black bear and brown bear removal of any sex and age of black bear and brown bear using state owned, privately owned, or chartered equipment, including helicopters under AS16.05.783
8. Reducing predation can reasonably be expected to aid in achievement of the population and harvest objectives.

Vote: 7-0  
March 9, 2012  
Fairbanks, Alaska

  
Cliff Judkins, Chairman  
Alaska Board of Game

**Findings for the Alaska Board of Game  
2012-195-BOG  
Unit 24(B) Moose  
Intensive Management Supplemental Findings  
March 9, 2012**


The Board of Game finds as follows, based on information provided by Department staff, Alaska residents and other users of moose in Unit 24(B). These findings are supplemental to the findings set forth in 5AAC 92.125, and 92.108.

1. This is an experimental program that will have limited impact on the moose and wolf populations in Unit 24(B). It is designed primarily to reallocate moose from wolves to humans in the 1,360 square mile Upper Koyukuk Management Area (UKMA) and is expected to make only a small contribution to the intensive management (IM) moose harvest objective in Unit 24(B).
2. The Unit 24(B) IM moose population and harvest objectives have not been achieved. The IM objectives established by the board are for a population of 4,000–4,500 and an annual harvest of 150–250. In early winter 2010 the observable moose population size in Unit 24(B) was estimated at 1,800–3,400, based on extrapolation of population estimates from survey areas in the unit. Estimated annual harvest in Unit 24(B) was 82–109 moose.
3. Predation by bears and wolves has been identified as an important cause of the failure to achieve moose population and harvest objectives. Moose surveys in Unit 24(B) during spring 2008–2011 indicated high twinning rates (average 57 percent), thus good body condition. Fall composition surveys in Unit 24(B) indicated high productivity, with calf:cow ratios averaging 44 calves per 100 cows, but cohort survival was low with yearling bulls averaging 11 per 100 cows. These survey data and a predicted calving rate of 80 percent indicate more calves are lost during summer (due primarily to bear predation) than winter (due primarily to wolf predation).
4. Only wolf numbers will be reduced in the UKMA as a component of this predation control program because lethal bear removal is not deemed feasible at this time.
5. Nevertheless, a reduction of wolf predation within the UKMA can reasonably be expected to make progress towards achieving the Unit 24(B) IM objectives. Modeling of the current moose abundance in the UKMA using estimated abundance of 45–55 wolves, 75 black bears, 25 grizzly bears, 405 ( $\pm 97$ ) moose, and a harvest of 20 moose annually, indicated that moose abundance should slowly increase in response to wolf control that increases calf and yearling moose survival. Wolf control alone likely will result in a positive response in moose abundance after 5 winters of control, including reallocation of some surviving moose to harvest.
6. Reducing predation is likely to be effective and feasible utilizing recognized and prudent active management techniques and based on scientific information. Based on survey results indicating wolf predation is an important source of mortality, reducing wolves in a small

geographic area will likely result in increased moose survival and additional animals available for hunter harvest.

7. Reducing predation is likely to be effective given land ownership patterns. The UKMA was selected based on land ownership status (minimizing federal lands), proximity to traditional moose hunting areas for the villages of Allakaket and Alatna (maximizing inclusion of navigable river corridors), and habitat suitability. Within the UKMA, 125 square miles (9.2 percent) is federal land (BLM/USFWS), 576 square miles (42.3 percent) is Alaska Native corporation land, 659 square miles (48.4 percent) is State of Alaska lands.
8. Department employees may conduct aerial, land and shoot, or ground based lethal removal of wolves using state owned, privately owned, or chartered equipment, including helicopters, under AS 16.05.783.

Vote: 7-0  
March 9, 2012  
Fairbanks, Alaska

  
Cliff Judkins, Chairman  
Alaska Board of Game




**ALASKA BOARD OF GAME  
2010-183-BOG**

**Harvest of Game for Customary and Traditional  
Alaska Native Funerary and Mortuary Religious Ceremonies  
February, 2010**

1. Throughout the State of Alaska, Alaska Native cultures continue to rely on many species of fish, game, and other wild resources as important components of customary and traditional Alaska Native funerary and mortuary religious ceremonies.
2. Although customs and traditions vary across the state and from culture to culture, the Board has been able to determine that a few principles appear to be consistent in all such ceremonies.
3. One consistent principle is that each ceremony is associated with a particular village, clan, or other group recognized as a cohesive unit by Alaska Native people. A ceremony is not a “customary and traditional Alaska Native funerary or mortuary religious ceremony” unless it is associated with a particular village, clan or other Alaska Native group and performed in accordance with their self-defined customs and traditions.
4. Another consistent principle is that these ceremonies involve consumption of, ideally, a wide variety of wild foods that are customarily and traditionally consumed by members of the village, clan, or other Alaska Native group in their particular locality. While store-bought foods are also often important, hunters for these ceremonies tend to focus their efforts on obtaining species that are viewed as customary and traditional foods with spiritual and cultural meaning, rather than introduced species. The species listed with “positive” findings in 5 AAC 99.125 are a comprehensive list of species that are more or less important for customary and traditional Alaska Native funerary and mortuary religious ceremonies outside of non-subsistence areas where such findings are not made. A similar range of species are traditionally harvested for these ceremonies in non-subsistence areas, however.
5. A third consistent principle is that participants where hunting to provide food for these ceremonies participate because of relationships they have to the deceased and the deceased’s family, clan, or community through birth, marriage, adoption, or other social processes recognized by Alaska Native groups.
6. Although traditions vary by community and cultural groups, throughout Alaska, traditional laws govern the initiation and organization of customary and traditional Alaska Native funerary and mortuary religious ceremonies. For example, these traditional laws stipulate who may initiate and organize these ceremonies based upon genealogical or other social relationships with the deceased.
7. The Board of Game recognizes that customary and traditional Alaska Native funerary and mortuary religious ceremonies are constitutionally protected activities that must be

accommodated, absent a contrary and compelling state interest that may not otherwise be served. When presented with requests to accommodate specific ceremonies, the Board will attempt to develop regulations specific to those ceremonies. 5 AAC 92.019 is the Board's effort to accommodate customary and traditional Alaska Native funerary and mortuary religious ceremonies that have not yet been specifically provided for.

Vote: 7-0  
February 1, 2010  
Anchorage, Alaska

  
Cliff Judkins, Chairman  
Alaska Board of Game

**Findings for the Alaska Board of Game  
2009-182-BOG**


**Units 12, 20B, 20D, 20E, and 25C Intensive Management Supplemental Findings  
March 09, 2009**

The Board of Game finds as follows, based on information provided by department staff and residents and users of moose in Unit 12 north of the Alaska Highway and 20E; and caribou in Unit 12 north of the Alaska Highway, Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, Billy and Sand Creek drainages, Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage, all of Unit 20E, and Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area draining into the south and west bank of the Yukon River upstream from the community of Circle. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Upper Yukon/Tanana predation control implementation plan in 5AAC 92.125 and in Board of Game Findings 2006-164-BOG, 2006-165-BOG, and 2008-177-BOG

1. The Fortymile Caribou Herd population size, currently estimated to be near 40,000 caribou, is less than the population objective of 50,000-100,000 caribou. The population objective has not been achieved since at least 1976.
2. The Fortymile Caribou Herd harvestable surplus, as described in 5AAC 92.106(3)(A), currently estimated at 850 caribou, is less than the harvest objective of 1,000–15,000 caribou. The harvest objective has not been achieved since at least 1976.
3. The 2007 moose population size in Unit 12 north of the Alaska Highway and Unit 20E, was estimated to be 4,000–6,100 moose, and is less than the population objective of 8,744–11,116 moose (derived from the combined Units 12 and 20E objectives based on proportionate area). The population objective has not been achieved since at least 1986.
4. The harvestable surplus of moose in Unit 12 north of the Alaska Highway and Unit 20E, as described in 5AAC 92.106(3)(A), currently estimated at 160–244 bulls, is less than the harvest objective of 547–1,084 moose (derived from the combined Units 12 and 20E objectives based on proportionate area). The harvest objective has not been achieved since at least 1986.
5. The Fortymile Caribou Herd in Unit 12 north of the Alaska Highway, Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, Billy and Sand Creek drainages, Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage, all of Unit 20E, and Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area draining into the south and west bank of the Yukon River upstream from the community of Circle is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.

6. The moose population in Unit 12 north of the Alaska Highway and Unit 20E is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.
7. Enhancement of abundance or productivity of both moose and caribou in these areas is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
8. The Board has repeatedly, since 1976, been required to significantly reduce the taking of Fortymile caribou in Unit 12 north of the Alaska Highway, Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, Billy and Sand Creek drainages, Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage, all of Unit 20E, and Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area draining into the south and west bank of the Yukon River upstream from the community of Circle by restricting harvest, seasons, and bag limits as compared to the level and timing of hunting opportunity that was previously allowed when the population was not depleted and reduced in productivity.
9. The Board has, since 2000, been required to limit the taking of moose in Unit 12 north of the Alaska Highway, and Unit 20E by restricting harvest, seasons, and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.
10. The population and harvest objectives for both moose and caribou in this area have not been achieved, at least in part, because wolf and brown bear predation have been important causes of mortality in the populations, to the extent that the populations are unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.
11. Reducing predation can reasonably be expected to aid in achievement of the caribou and moose population and harvest objectives.

Vote: 5-0-2  
March 9, 2009  
Anchorage Alaska

  
Cliff Jenkins, Chairman  
Alaska Board of Game

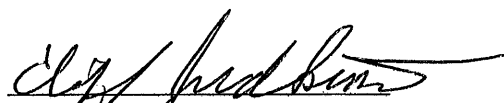
**Findings for the Alaska Board of Game  
2009-181-BOG**

**Unit 19D-East Intensive Management Supplemental Findings  
March 9, 2009**

The Board of Game finds as follows, based on information provided by Department staff and residents and users of moose in Unit 19D-East. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Unit 19-East predation control implementation plan in 5 AAC 92.125 and in Board of Game Findings 2006-164-BOG, 2006-169-BOG, and 2008-174-BOG.

1. The moose population size, currently estimated to be 5481 moose, is less than the population objective of 6,000-8,000 moose. The population objective has not been achieved for at least the last 8 years.
2. The Unit 19D-East moose harvestable surplus, as described in 5 AAC 92.106(3)(A), currently estimated at 219 bulls, is less than the harvest objective of 400-600 moose. The harvest objective has not been achieved for at least the last 8 years.
3. The Unit 19D-East moose population is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.
4. Enhancement of abundance or productivity is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
5. The Board has repeatedly, since 1995, been required to significantly reduce the taking of moose in Unit 19D-East by restricting harvest, seasons and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.
6. The population and harvest objectives have not been achieved, at least in part, because wolf, black bear, and brown bear predation have been important causes of mortality in the population, to the extent that the population is unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.
7. Reducing predation can reasonably be expected to aid in achievement of the population and harvest objectives.

Vote: 5-0-2  
March 9, 2009  
Anchorage, Alaska

  
Cliff Judkins, Chairman  
Alaska Board of Game

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**Findings for the Alaska Board of Game  
2008-177-BOG**

**Units 12, 20B, 20D, 20E, and 25C Intensive Management Supplemental Findings  
March 21, 2008**

The Board of Game finds as follows, based on information provided by department staff and residents and users of moose in Unit 12 north of the Alaska Highway and 20E; and caribou in Unit 12 north of the Alaska Highway, Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, Billy and Sand Creek drainages, Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage, all of Unit 20E, and Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area draining into the south and west bank of the Yukon River upstream from the community of Circle. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Upper Yukon/Tanana predation control implementation plan in 5AAC 92.125 and in Board of Game Findings 2006-164-BOG and 2006-165-BOG.

1. The Fortymile Caribou Herd population size, currently estimated to be near 39,000 caribou, is less than the population objective of 50,000-100,000 caribou. The population objective has not been achieved since at least 1976.
2. The Fortymile Caribou Herd harvestable surplus, as described in 5AAC 92.106(3)(A), currently estimated at 850 caribou, is less than the harvest objective of 1,000-15,000 caribou. The harvest objective has not been achieved since at least 1976.

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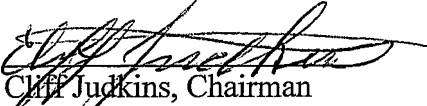
3. The moose population size in Unit 12 north of the Alaska Highway and Unit 20E, is currently estimated to be 4,000-6,100 moose, is less than the population objective of 8,744-11,116 moose (derived from the combined Units 12 and 20E objectives based on proportionate area). The population objective has not been achieved since at least 1986.
4. The harvestable surplus of moose in Unit 12 north of the Alaska Highway and Unit 20E, as described in 5AAC 92.106(3)(A), currently estimated at 160-244 bulls, is less than the harvest objective of 547-1,084 moose (derived from the combined Units 12 and 20E objectives based on proportionate area). The harvest objective has not been achieved since at least 1986.
5. The Fortymile Caribou Herd in Unit 12 north of the Alaska Highway, Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, Billy and Sand Creek drainages, Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage, all of Unit 20E, and Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area draining into the south and west bank of the Yukon River upstream from the community of Circle is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.

6. The moose population in Unit 12 north of the Alaska Highway and Unit 20E is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.
7. Enhancement of abundance or productivity of both moose and caribou in these areas is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
8. The Board has repeatedly, since 1976, been required to significantly reduce the taking of Fortymile caribou in Unit 12 north of the Alaska Highway, Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, Billy and Sand Creek drainages, Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage, all of Unit 20E, and Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area draining into the south and west bank of the Yukon River upstream from the community of Circle by restricting harvest, seasons, and bag limits as compared to the level and timing of hunting opportunity that was previously allowed when the population was not depleted and reduced in productivity.
9. The Board has, since 2000, been required to limit the taking of moose in Unit 12 north of the Alaska Highway, and Unit 20E by restricting harvest, seasons, and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.

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10. The population and harvest objectives for both moose and caribou in this area have not been achieved, at least in part, because wolf and brown bear predation have been important causes of mortality in the populations, to the extent that the populations are unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.
11. Reducing predation can reasonably be expected to aid in achievement of the caribou and moose population and harvest objectives.
12. A person who has been airborne may on the same day take a brown bear with the use of bait or scent lure as authorized under a permit provided by the department, providing the permittee is at least 300 feet from the airplane at the time of taking.

Vote: 6-0-1  
March 21, 2008  
Anchorage Alaska

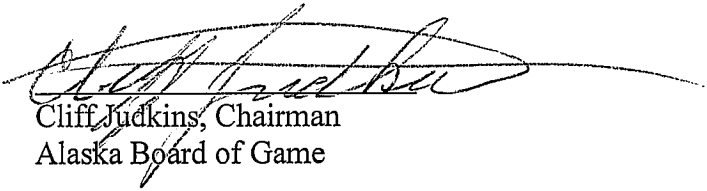
  
Cliff Judkins, Chairman  
Alaska Board of Game

**Finding for the Alaska Board of Game  
2008-174-BOG**

**Unit 19D East Supplemental Findings  
March 5, 2008**

The Board of Game finds that the moose population has increased within the Experimental Micro Management Area (EMMA) to the point that the limited harvest is now appropriate, although predator control should be continued in order to consolidate gains made. The following information supports a limited harvest.

1. The moose population has increased by approximately 350 animals (524 to 874) between 2001 and 2007.
2. The bull/cow ratio is well within management objectives, having increased from 18/100 to 39/100 between 2001 and 2007.
3. At 39 bulls per 100 cows, there is a harvestable surplus of bulls that can be used to provide an opportunity that is critical to local subsistence users. The Board of Game notes that local users have voluntarily refrained from taking moose in this area, which is where many of them live, for the past five years.



Cliff Judkins, Chairman  
Alaska Board of Game

Vote: 6-0-1  
March 5, 2008  
Fairbanks, Alaska



**Alaska Board of Game  
Policy for the  
Annual Reauthorization of Antlerless Moose**

**#2007-172-BOG**

**Background**

Alaska Statute **AS 16.05.780** requires the Board of Game to reauthorize the Antlerless moose seasons in each Game Management Unit, subunit or any other authorized antlerless moose season on a yearly basis.

In order for the Board to comply with AS 16.05.780, it must consider that antlerless moose seasons require approval by a majority of the active advisory committees located in, or the majority of whose members reside in, the affected unit or subunit. For the purpose of this section, an “active advisory committee” is a committee that holds a meeting and acts on the proposal.

Because of the requirement for yearly reauthorization, the Board of Game approves of the proposals in order to insure they remain in regulation. In the case of the antlerless moose seasons, the Board of Game has delegated authority to the Department which allows them to administer a hunt if there is an allowable harvest of antlerless moose. The Board of Game has provided language to allow the Department to issue an “up to” number of permits so that we do not have to try and set a hard number each year. In most years it would be very difficult for a decision on allowable harvest to be made prior to the surveys the Department makes of the moose population.

This requirement for yearly authorization takes a lot of valuable Board time as well as requiring the Department to bring in area biologists or regional supervisors to present to the Board information on the proposed regulation. The attendance of many of these area biologists or regional supervisors is not required for any other proposed regulatory changes that the Board will consider in the normal Board cycle of proposals.

Because this requirement increases the cost to the Department and the Board, and because the annual reauthorization for some of the antlerless moose seasons may be considered a house keeping requirement in order to comply with AS 16.05.780, the Board has determined that a more efficient way to handle the annual reauthorization should be adopted and has established the following policy in agreement with the Department.

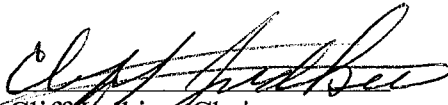
**Policy for yearly authorization of Antlerless Moose Hunts by the Board of Game**

Each year, the Department will present as a package for approval all of the antlerless moose proposals. During that presentation, if there are any changes that will be required to be considered, they will be noted for later discussion.

Because the Board had delegated the authority to the Department to hold antlerless moose hunts, there are many hunts that do not occur based on biology. The Department and the Board finds that it is important to keep these regulations on the books so that when opportunity exists, the Department will have the ability to provide additional opportunity for the use of antlerless moose.

The Board agrees that it will minimize debate during the presentation and only consider extensive discussion on any reauthorization that will be associated with a pending proposal submitted during the normal cycle to be considered. This discussion will be limited to any proposal submitted to the Board and not during the approval fo the packaged proposals for reauthorization of antlerless moose seasons.

The Board is aware of the time and expense required to comply with AS 16.05.780; it feels that by adopting this policy both the Department and Board will be better served.



Cliff Ludkins, Chairman  
Alaska Board of Game

Vote: 7-0  
March 12, 2007  
Anchorage, Alaska

**Findings for the Alaska Board of Game  
2006-169-BOG**

**Unit 19D-East Intensive Management Supplemental Findings  
May 14, 2006**

The Board of Game finds as follows, based on information provided by Department staff and residents and users of moose in Unit 19D-East. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Unit 19-East predation control implementation plan in 5 AAC 92.125 and in Board of Game Findings 2006-164-BOG.

1. The moose population size, currently estimated to be 3,444-5,281 moose, is less than the population objective of 6,000-8,000 moose. The population objective has not been achieved for at least the last 5 years.
2. The Unit 19D-East moose harvestable surplus, as described in 5 AAC 92.106(3)(A), currently estimated at 138-158 bulls, is less than the harvest objective of 400-600 moose. The harvest objective has not been achieved for at least the last 5 years.
3. The Unit 19D-East moose population is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.
4. Enhancement of abundance or productivity is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
5. The Board has repeatedly, since 1995, been required to significantly reduce the taking of moose in Unit 19D-East by restricting harvest, seasons and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.
6. The population and harvest objectives have not been achieved, at least in part, because wolf, black bear, and brown bear predation have been important causes of mortality in the population, to the extent that the population is unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.
7. The Department will apply the following conditions to brown bear control permits in addition to any other conditions considered necessary:
  - a. Cubs or females with cubs may not be taken. For purposes of this program "cub" is defined according to 5 AAC 92.990 (a)(12).
  - b. A valid Alaska State resident hunting license is required.
  - c. Permits are valid from the date of issuance through June 30 or until the control program is closed by emergency order.

d. Bears may be taken with the use of bait or scent lures subject to the following restrictions:

-For purposes of this control program "bait" means any material, including scent lures, that is placed to attract an animal by its sense of smell or taste. Bait does not include those parts of legally taken animals that are not required to be salvaged as edible meat if the parts are not moved from the kill site.

-Only biodegradable materials may be used for bait; only the bones, viscera or skin of legally acquired fish and game may be used for bait.

-A person may not use bait or scent lures within one-quarter mile of a publicly maintained road or trail.

-A person may not use bait or scent lures within one mile of a house or other permanent dwelling, or within one mile of a developed campground or developed recreational facility.

-A person using bait or scent lures shall clearly identify the site with signs at all access points reading "brown bear control bait station" that also displays the person's control program permit number.

-A person using bait shall remove bait, litter and equipment from the bait station site as required by the control permit.


8. Reducing predation can reasonably be expected to aid in achievement of the population and harvest objectives.

9. A person who has been airborne may on the same day take a brown bear with the use of bait or scent lure as authorized under a permit providing the permittee is at least 300 feet from the airplane at the time of taking.

Vote: 6-0-1

May 14, 2006

Anchorage, Alaska

  
Mike Fleagle, Chairman  
Alaska Board of Game


**Findings for the Alaska Board of Game  
2006-168-BOG**

**Unit 19A Intensive Management Supplemental Findings  
May 14, 2006**

The Board of Game finds as follows, based on information provided by Department staff and residents and users of moose in Unit 19A. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Unit 19A predation control implementation plan in 5 AAC 92.125, and in Board of Game Findings 2004-150-BOG.

1. The moose population size, currently estimated to be 2,700-4,250 moose, is less than the population objective of 7,600-9,300 moose (derived from the combined Units 19A and 19B objective based on proportionate area). The population objective has not been achieved for at least the last 5 years.
2. The Unit 19A moose harvestable surplus, as described in 5 AAC 92.106(3)(A), there is no harvestable surplus in eastern Unit 19A (upstream from and excluding the George River drainage), excluding the Lime Village Management Area. In western Unit 19A (downstream from and including the George River drainage), the harvestable surplus is 60 bulls. This is less than the harvest objective of 400-550 moose (also based on proportionate area). The harvest objective has not been achieved for at least the last 5 years.
3. The Unit 19A moose population is, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.
4. Enhancement of abundance or productivity is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
5. The Board has repeatedly, since 2002, been required to significantly reduce the taking of moose in Unit 19A by restricting harvest, seasons and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.
6. The population and harvest objectives have not been achieved, at least in part, because wolf predation has been an important cause of mortality in the population, to the extent that the population is unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.
7. Reducing predation can reasonably be expected to aid in achievement of the population and harvest objectives.

Vote: 6-0-1  
May 14, 2006  
Anchorage, Alaska

  
Mike Fleagle, Chairman  
Alaska Board of Game

**Findings for the Alaska Board of Game  
2006-165-BOG**

**Unit 12 and 20E Intensive Management Supplemental Findings  
May 14, 2006**

The Board of Game finds as follows, based on information provided by department staff and residents and users of moose in Units 12 and 20E. These findings are supplemental to the findings set forth in 5AAC 92.108, in the Units 12 and 20E predation control implementation plan in 5 AAC 92.125 and in Board of Game Findings 2006-164-BOG.

1. The Fortymile Caribou Herd population size, currently estimated to be 40,000-42,000 caribou, is less than the population objective of 50,000-100,000 caribou. The population objective has not been achieved for at least the last 30 years.
2. The Fortymile Caribou Herd harvestable surplus, as described in 5 AAC 92.106(3)(A), currently estimated at 840-880 bulls, is less than the harvest objective of 1,000-15,000 caribou. The harvest objective has not been achieved for at least the last 30 years.
3. The moose population size in Unit 12 north of the Alaska Highway and Unit 20E, currently estimated to be 4,300-5,200 moose, is less than the population objective of 8,744-11,116 moose (derived from the combined Units 12 and 20E objectives based on proportionate area). The population objective has not been achieved for at least the last 20 years.
4. The harvestable surplus of moose in Unit 12 north of the Alaska Highway and Unit 20E, as described in 5 AAC 92.106(3)(A), currently estimated at 135-201 bulls, is less than the harvest objective of 547-1,084 moose (derived from the combined Units 12 and 20E objectives based on proportionate area). The harvest objective has not been achieved for at least the last 20 years.
5. The Fortymile Caribou Herd and the moose population in Unit 12 north of the Alaska Highway and Unit 20E are, thus, depleted and reduced in productivity, which has already resulted in a significant reduction in the allowable human harvest of the population.
6. Enhancement of abundance or productivity of both moose and caribou in this area is feasibly achievable utilizing the recognized and prudent active management technique of predator control.
7. The Board has repeatedly, since 1976, been required to significantly reduce the taking of Fortymile caribou by restricting harvest, seasons and bag limits as compared to the level and timing of hunting opportunity that was previously allowed when the population was not depleted and reduced in productivity.

8. The Board has, since 2000, been required to limit the taking of moose in Unit 12 north of the Alaska Highway and Unit 20E by restricting harvest, seasons and bag limits as compared to the level and timing of hunting opportunity that was allowed when the population was not depleted and reduced in productivity.

9. The population and harvest objectives for both moose and caribou in this area have not been achieved, at least in part, because wolf and brown bear predation have been important causes of mortality in the populations, to the extent that the populations are unlikely to recover, and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted.

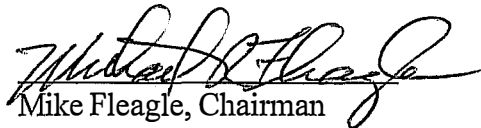
10. Reducing predation can reasonably be expected to aid in achievement of the caribou and moose population and harvest objectives.

11. A person who has been airborne may on the same day take a brown bear with the use of bait or scent lure as authorized under a permit provided by the Department, providing the permittee is at least 300 feet from the airplane at the time of taking.

Vote: 6-0-1

May 14, 2006

Anchorage, Alaska

A handwritten signature in black ink, appearing to read "Mike Fleagle". The signature is written in a cursive, flowing style.

Mike Fleagle, Chairman  
Alaska Board of Game

**Findings of the Alaska Board of Game  
2004-152-BOG**

**Authorizing Wolf and Bear Predation Control in Portions  
of the Upper Yukon/Tanana Predation Control Area**

November 5, 2004

**Purpose and Need**

This action of the Board of Game is to authorize a wolf and brown bear predation control program in the northwest Unit 12 and southern Unit 20(E) portions of the Upper Yukon/Tanana Wolf and Brown Bear Predation Control Area (5 AAC 92.125 (X)) in accordance with AS 16.05.783 (Same day airborne hunting), 5 AAC 92.039 (Permit for taking wolves using aircraft), 5 AAC 92.110 (Control of predation by wolves), and 5 AAC 92.115 (Control of predation by bears). This authorization does not currently include all of the Upper Yukon/Tanana Wolf and Brown Bear Predation Control Area.

It is very unlikely that the Intensive Management population and harvest objectives for moose will be achieved in the foreseeable future unless wolf and bear predation on moose is reduced through a predation control program.

**Identified Big Game Prey Population and Wolf and Bear Predation Control Area**

The Upper Yukon/Tanana Wolf and Brown Bear Predation Control Area includes both Units 12 (approximately 10,000 mi<sup>2</sup>) and 20(E) (approximately 10,680 mi<sup>2</sup>). The Board has identified moose populations in Unit 12 and that portion of Unit 20(E) drained by the Fortymile and Ladue Rivers (approximately 6,700 mi<sup>2</sup>) as important for providing high levels of harvest for human consumptive use in accordance with the Intensive Management statute and regulations (AS 16.05.255(e)–(g), 5 AAC 92.106, and 5 AAC 92.108).

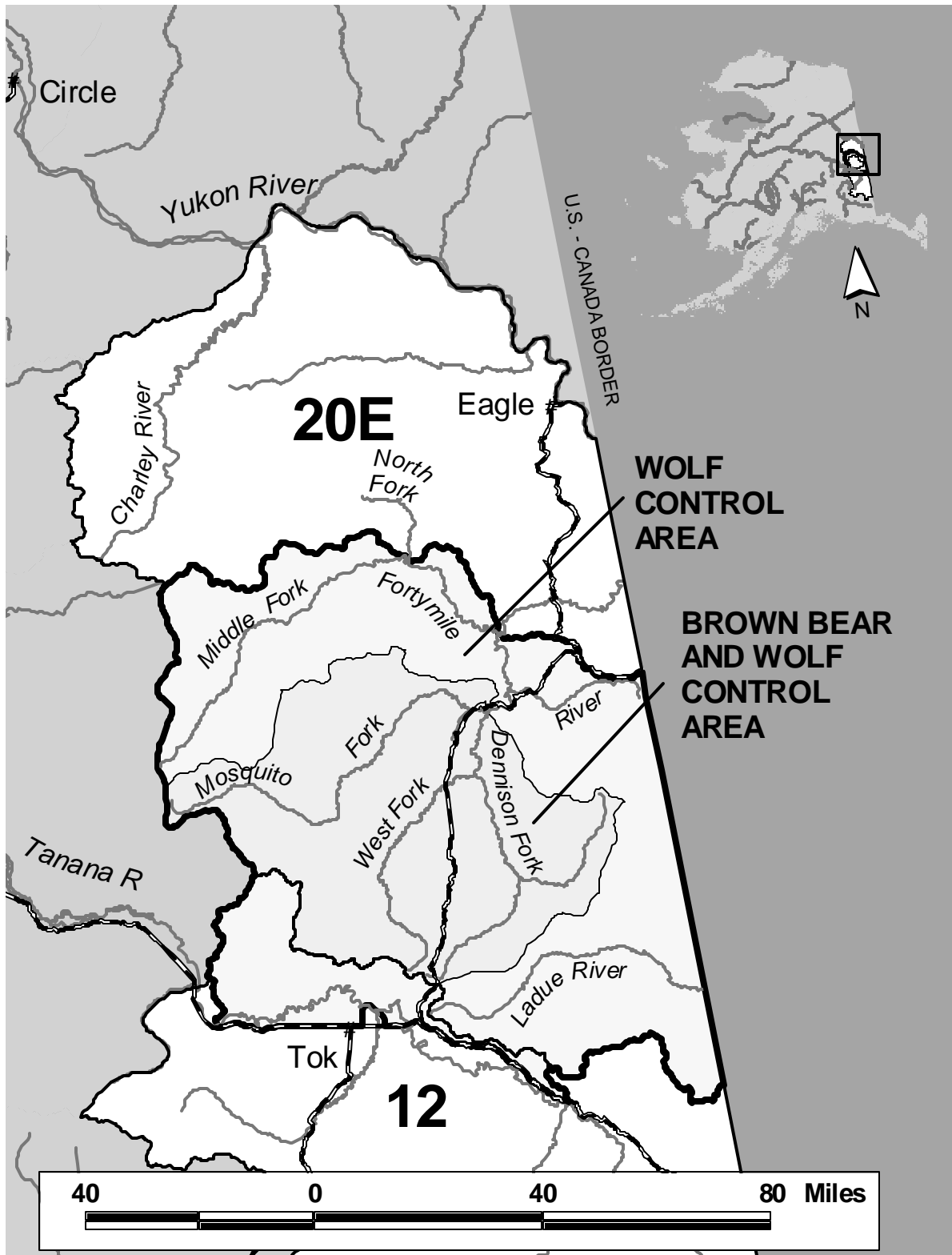
This authorization for predation control includes only southern Unit 20(E) and a small adjacent portion of northwestern Unit 12. Specifically, wolf predation control is authorized in the portion of Unit 12 north of the Alaska Highway and west of the Taylor Highway and for that portion of Unit 20(E) within all drainages of the South Fork Fortymile River, the North Fork Fortymile River downstream of its confluence with the Middle Fork Fortymile River, the Middle Fork Fortymile River and Ladue River, encompassing a total of approximately 6600 mi<sup>2</sup>. Brown bear predation control is authorized in a smaller focus area within the larger area authorized for wolf control. Specifically, bear predation control is authorized in the portion of Unit 20(E) within the Fortymile River drainage upstream from and including the Wall Street Creek drainage, encompassing a total of approximately 2700 mi<sup>2</sup> (Figure 1).

**Background**

Unit 20(E) encompasses several drainages of the upper Yukon River and includes the communities of Chicken, Boundary, Eagle, Eagle Village and other smaller settlements. Moose in the unit are an important subsistence resource for these communities, for the adjacent communities of Tanacross, Tok, Tetlin, and Northway, and for other residents of Interior and Southcentral Alaska. This unit also provides important hunting opportunities for non-resident hunters and the guiding and transporting industries.



Figure 1. Authorized bear and wolf predation control area.



For more than 20 years, local communities have expressed concern about chronically low moose density due to predation and have proposed various predator control programs to increase moose numbers. Most recently at the February-March 2004 Board of Game Meeting, the Upper Tanana/Fortymile Fish and Game Advisory Committee and the public provided testimony explaining the problem and made proposals to correct the situation. The Board of Game subsequently requested the Department to prepare a draft wolf and brown bear predation control implementation plan for the November 2004 Board meeting in Juneau.

### Status of the Moose Population

Available evidence suggests the moose population in Unit 20(E) was much higher in the 1960's, but since the late 1970's, it has been at low density. During 1981 – 2003, the department conducted ten moose density estimation surveys, which confirmed chronically low numbers. The 2003 population estimate for the entire unit was 4,000 – 4,800, or 0.5 – 0.6 moose per square mile of suitable moose habitat (8,000 square miles), with a calf:cow ratio of 13:100. The unit-wide population estimate is well below the Intensive Management objective of 8,000 – 10,000, which applies only to the Fortymile and Ladue River drainages.

Habitat quality and availability are likely not important factors limiting the moose population. In the 1960s, Unit 20(E) likely supported a higher density than currently; however, no reliable population estimates were obtained. In southern Unit 20(E), high twinning rates of 52% for adult cows observed during a 1984 research project and 31% observed during spring 2004 surveys indicate habitat in this area is capable of sustaining a higher density. By comparison in Unit 20(A), where habitat is an important limiting factor, twinning rates since 1996 averaged 8%. These rates are some of the lowest documented in North America. In addition, wildfires that usually result in improved habitat conditions are common in Unit 20(E) and fire suppression efforts are limited. Over 1600 square miles of habitat were burned in 2004 alone, which may benefit future moose productivity and recruitment. All indications are that moose habitat is capable of sustaining at least 1.0 – 1.5 moose per square mile in much of the unit.

### Trends in Moose Harvest

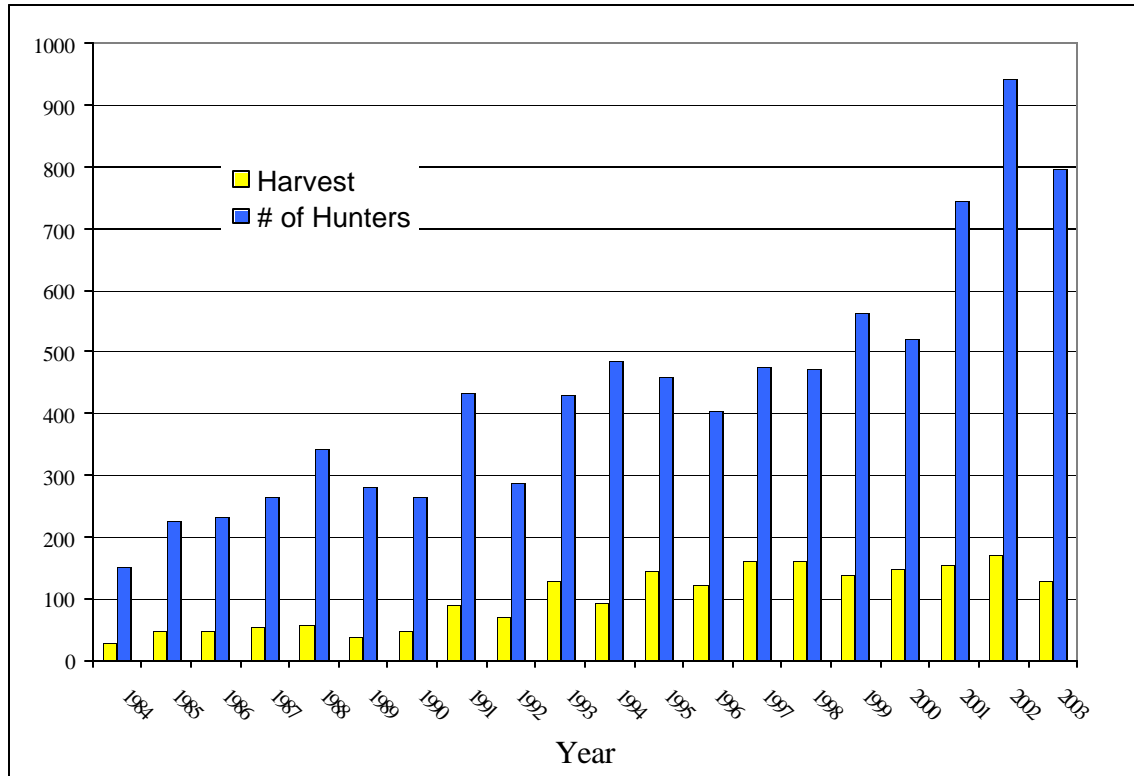
High moose densities in Unit 20(E) supported a long hunting season and a bag limit of one moose of either sex during the 1960s. As declines began in the early 1970s, hunting for cows was closed. The season was shortened in 1973 and closed during 1977 – 1981. A ten-day bulls-only season was held during 1982 – 1990, and lengthened to 15 days, including antler restrictions during 1991 – 2004, with up to an additional 30 days in limited portions of the unit.

Reported moose harvest in Unit 20(E) ranged from means of 120 in the mid-1960s, to 93 in the early 1970s, and to 148 during 1999 – 2003. In the mid 1960s, hunter numbers were relatively low and the moose population was likely higher than today. After the 1960s, hunter numbers increased and the moose declined to a lower density. This required more restrictive hunting regulations to stabilize harvest within sustainable levels. Unit-wide harvest is well below the Intensive Management harvest objective of 500 – 1,000, which applies only to the Fortymile and Ladue River drainages.

The increasing number of hunters is apparent during the past 20 years (Figure 1). Hunting pressure is expected to remain at current levels or continue increasing in the future, while the

moose population will likely remain at a low level. If this occurs, even more restrictive regulations will likely be required, including the possibility of allocation through Tier I or Tier II permits.

Figure 2. Unit 20(E) reported moose harvest and number of hunters, 1984 – 2003.



### Status of the wolf population

Since 1980, the early-winter wolf population in Unit 20(E) has been estimated using extrapolation of density estimates derived from data collected during intensive winter aerial surveys, information from interviews with local trappers and trapping records. The early-winter wolf population size estimate for 2002 – 2003 was 245 – 260 wolves. Hunting and trapping harvest over the past 5 years averaged 36 wolves annually in Unit 20(E) and has not exceeded sustainable levels.

Increasing numbers of caribou in the Fortymile herd and the winter migration of the Nelchina herd through the unit during the past 5 years appear to have allowed the wolf population to increase. Wolf densities in the northern and western parts of the unit are expected to further increase as packs sterilized under the Fortymile non-lethal wolf control program are replaced by unsterilized packs.

### Status of the brown bear population

The brown bear population size estimate for Unit 20(E) was 475 – 550 in 2002. This was based on extrapolation of a density estimate obtained in central Unit 20(E) during 1986 and on

intensive research studies conducted in similar habitats with similar bear food resources during 1981 – 1998 in Unit 20(A), 100 miles to the west.

Brown bear hunting seasons are longer and less restrictive than during the 1970s when the bear population was lightly harvested. Harvest varied from a mean of 3 during 1966 – 1981, to 19 during 1982 – 1988, and to 14 during 1989 – 2002. Mean proportion of males in the harvest 1989 – 2002 was 56%. Despite liberal regulations, harvest appears to have had little effect on bear population size.

### **The Objectives For The Big Game Prey Population or Harvest Established By The Board Of Game Have Not Been Achieved**

The current estimate of the moose population size and harvest is well below Intensive Management objectives established in 5 AAC 92.108. These objectives only apply to the Fortymile and Ladue River drainages within Unit 20(E). The population objective is 8,000 – 10,000, while the most recent population estimate for the entire unit is 4,000 – 4,800. The harvest objective is 500 – 1,000, and the reported harvest for the entire unit averaged 148 during 1999 – 2003.

### **Predation is an Important Cause for the Failure to Achieve the Population and Harvest Objectives Established by the Board of Game**

The moose population in Unit 20(E) has been at low density since the late 1970's. The chronically low moose population will likely remain in Low Density Dynamic Equilibrium indefinitely unless predation is reduced. Research conducted during the 1980s in central Unit 20(E) and recent surveys indicate brown bear predation on calves and wolf predation on all sex and age classes throughout the year are important limiting factors. In the research study area, where wolves had been reduced during a predator control program prior to the study, wolves killed 12 – 15 percent of moose calves that were born. Brown bears killed 52 percent and black bears killed 3 percent. Most brown bear predation occurred during the six weeks following calving, while wolf predation on all sex and age classes occurred throughout the year. Mean early winter ratios of 22 calves:100 cows, observed during aerial surveys in 1981–1988, suggest brown bear predation was important. There has been little change in this pattern since 1988, suggesting that brown bear predation remains a major factor in maintaining early winter ratios of 10 – 27 calves:100 cows during 1997 – 2003.

### **Reduction of Predation Provides a Reasonable Expectation of Achieving the Population and Harvest Objectives**

In the areas authorized for predation control, the Mosquito Flats and associated drainages upstream from the village of Chicken, include parts of Unit 20(E) heavily used by moose for calving and wintering. Intensive research conducted in this area during 1981–1988 identified brown bear predation as a major factor in maintaining low moose calf survival during spring, and wolf predation as most responsible for moose mortality during summer, fall and winter. Survey data collected after the research was completed suggests this pattern has not changed. In accordance with the Upper Yukon/Tanana Predator Control Implementation Plan, a 60% reduction of the bear population in a 2700-square mile focus area should increase moose calf survival. This reduction would entail the removal of approximately 81 bears, leaving

approximately 54. Because experience has shown that wolf packs preying upon moose in a focus area will include adjacent areas in their home ranges, reduction of the wolf population to no less than 50 wolves in the focus area and additional adjacent portions of 20(E) (approximately 6000 mi<sup>2</sup>) and northwestern Unit 12 (approximately 600 mi<sup>2</sup>) will also be necessary to make progress toward achieving Intensive Management objectives.

The bear focus area is 31% of the land area within Unit 20(E), and 50% of moose harvest in the unit comes from it. The focus area includes the Taylor Highway, 3 major trails, and 5 less-heavily used trails that provide access in the Intensive Management portions of Unit 20(E). This access will improve the likelihood of successful reduction of bear and wolf predation and will also provide opportunity to harvest moose once numbers increase.

Liberal seasons and bag limits for brown bears and wolves in Unit 20(E) have not resulted in harvest levels high enough to reduce predation and improve moose survival. Additional management actions are required.

### **The Board Establishes and Recommends the Following:**

1. The first priority for wolf and brown bear predation control in the Upper Yukon/Tanana Predation Control Area is to conduct control activities where the likelihood of success in increasing moose numbers by reducing predators is high and significant benefits to harvest can be derived. Those areas are the southern portion of Unit 20(E) and a small adjacent area in northwestern Unit 12.
2. 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.
3. Methods and means to take wolves may include land and shoot or shooting from aircraft as designated by the Department and in accordance with 5 AAC 92.039. At no time shall the wolf population in this area be reduced to fewer than 50 wolves. After periodic evaluation of the efficacy of the program, the Board of Game may modify in board findings the size or location of the area.
4. The Department will apply the following conditions to brown bear control permits in addition to any other conditions considered necessary:
  - a. Cubs or females with cubs may not be taken. For purposes of this program “cub” is defined according to 5 AAC 92.990 (a)(12).
  - b. A valid Alaska State resident hunting license is required.
  - c. Permits are valid from the date of issuance through June 30 or until the control program is closed by emergency order.
  - d. Bears may be taken with the use of bait or scent lures subject to the following restrictions:
    - i. For purposes of this control program “bait” means any material, including scent lures, that is placed to attract an animal by its sense of smell or taste. Bait does not include those parts of legally taken animals that are not required to be salvaged as edible meat if the parts are not moved from the kill site.



**Findings of the Alaska Board of Game  
2004-150-BOG**

**Authorizing Wolf Predation Control in the Unit 19(A) Portion  
of the Central Kuskokwim Wolf Predation Control Area  
With Airborne or Same Day Airborne Shooting**

**March 10, 2004**

**Purpose and Need**

This action of the Board of Game (Board) is to authorize a wolf predation control program in the Game Management Unit 19(A) portion of the Central Kuskokwim Wolf Predation Control Area in accordance with AS 16.05.783, Same day airborne hunting, 5 AAC 92.039, Permit for taking wolves using aircraft, and 5 AAC 92.110, Control of predation by wolves. This authorization does not currently include the Unit 19(B) portion of the Central Kuskokwim Wolf Predation Control Area.

There is no expectation that the Intensive Management population and harvest objectives for moose will be achieved in a reasonable time frame unless wolf predation on moose is reduced through a wolf predation control program.

**Identified Big Game Prey Population and Wolf Predation Control Area**

The Central Kuskokwim Wolf Predation Control Implementation Area includes both Units 19(A) and 19(B) and encompasses approximately 17,680 mi<sup>2</sup>, including all land ownerships. The Board has identified moose populations in Units 19(A) and 19(B) as important for providing high levels of harvest for human consumptive use in accordance with the Intensive Management statute and regulations (AS 16.05.255(e)-(g), 5 AAC 92.106, and 5 AAC 92.108).

The Board's present authorization for wolf control using airborne or same-day-airborne shooting includes those portions of the Kuskokwim River drainage within Unit 19(A) defined in 5 AAC 92.450(19)(A), encompassing approximately 9,969 mi<sup>2</sup>.

**Background**

Unit 19(A) encompasses the Central Kuskokwim River and the communities of Lower and Upper Kalskag, Aniak, Chuathbaluk, Crooked Creek, Red Devil, Sleetmute, Stony River, Lime Village, and other smaller settlements. Residents of Unit 19(A) depend on moose as a primary subsistence food source. Residents of communities in Unit 18 travel up the Kuskokwim River to harvest moose for subsistence and other uses, as do other Alaska residents who access the area by aircraft.

Unit 19(B) is also included in the Central Kuskokwim Wolf Predation Control Area. It encompasses the upper portions of several tributaries to the Kuskokwim River. Although there are no communities in the unit, the area provides moose that are important for subsistence use

and personal consumption of moose by Alaska residents. Units 19(A) and (B) have also provided hunting opportunities that are important for non-resident hunters and the guiding and transporting industries.

For several years, the Central Kuskokwim Fish and Game Advisory Committee (CKAC) has expressed concern to the Board about declining moose numbers in Units 19(A) and 19(B). The committee has submitted several regulation proposals and recommended wolf predation control to stop the decline of the moose population and boost moose numbers in the area. In response to the concerns of the CKAC and other users, the Alaska Department of Fish and Game (ADF&G) initiated a comprehensive planning process for the area with a citizen based planning committee composed of a broad cross-section of stakeholders in Units 19(A) and (B) wildlife management. Upon reviewing information on the moose populations, the majority of the Central Kuskokwim Moose Management Planning Committee (CKMC) agreed:

***“There is a major concern that the moose populations in Units 19(A) and 19(B) will not meet the needs of local subsistence users and other consumptive users. Local observations and available scientific data indicate that the moose population has substantially declined and in some areas is very low and will continue to jeopardize subsistence and other uses.”***

The Central Kuskokwim Moose Management Plan developed by the CKMC is a comprehensive plan for the area that includes a recommendation for a wolf predation control program for Units 19(A) and (B). The control program is one component of a multifaceted plan to rebuild the moose populations in the Central Kuskokwim region. The CKMC recommended that the first priority for wolf predation control efforts should be the areas most important for providing moose for subsistence uses. Unit 19(A) is where the majority of subsistence moose hunting by local residents and residents of Unit 18 occurs.

#### Status of the Moose Population

A moose population estimate conducted in Unit 19(A) in March 1998 indicated a density of 1.25 moose per mi<sup>2</sup> in the Holitna and Hoholitna drainages where moose are most abundant. Moose densities are much lower in surrounding areas of lower habitat quality. A March 2001 population estimate in Unit 19(A) in the Aniak River area indicated a density of 0.7 moose per mi<sup>2</sup>. The Aniak survey area is surrounded by other areas of lower habitat quality where moose densities are much lower. Extrapolation of the 1998 and 2001 survey data results in a population estimate of 6,800 – 11,300 moose for Units 19(A) and 19(B). If the moose population has decreased since the last (2001) population estimation survey as is suggested by other moose survey data and observations of local residents and others, the population is probably lower.

There is a great deal of concern about the low calf:cow and bull:cow ratios in the moose population in Unit 19(A). A November 2001 trend count conducted in a relatively small and heavily hunted area along the Holitna/Hoholitna Rivers indicated only 8 calves:100 cows and 6 bulls:100 cows (sample size 196 moose).

A late winter survey to estimate calf survival conducted in April 2003 in Unit 19(A) resulted in



an estimate of 7.6% calves in the moose population in Holitna/Hoholitna drainage (sample size 107 adults and 9 short-yearlings) and 8.9% in the moose population in the Aniak drainage (sample size 61 adults and 6 short-yearlings).

The calf:cow ratios in fall and percent of calves found in spring surveys support the belief that calf survival in the moose population is very low, a decline in moose numbers is occurring, and the actual number of moose is likely lower.

The Department's data is specific to 19(A), but the information is indicative of the entire Central Kuskokwim Wolf Predation Control Area.

### Trends in Moose Harvest

Numbers of reported hunters and moose harvested have declined substantially since the mid 1990s (Figure 1). Total reported moose harvest in Units 19(A) and (B) has declined 48% from the 1994-95 season (331 moose) to the 2002-03 season (148 moose). In Unit 19(A), the number of moose reported harvested by local residents and other Alaska residents declined approximately 65% (from 138 moose to 48 moose) between 1994-95 and 2002-03. Hunting in Unit 19(B) by non-local Alaska residents has declined from 199 hunters who harvested 71 moose in 1994-95 to 80 hunters who harvested 14 moose in 2002-03. Numbers of moose taken by nonresident hunters declined in Units 19(A) and (B) from 101 moose taken in 1994-95 to 83 moose taken in 2002-03. If estimated unreported harvest is added to these figures, the trend of harvest having declined by approximately 50% over the last 8 years is unchanged.

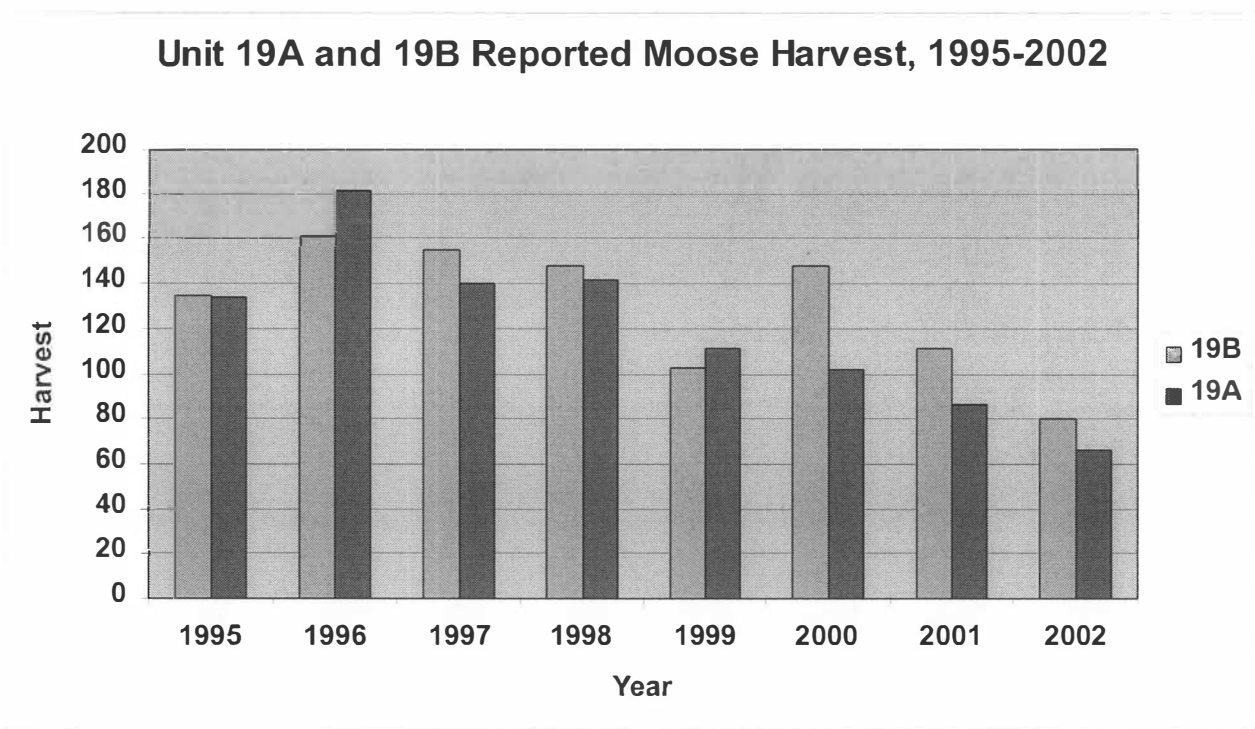


Figure 1. Decline in reported moose harvest in GMUs 19(A) and 19(B) since 1995.

**The Objectives For The Big Game Prey Population Established By The Board Of Game Have Not Been Achieved**

<u>Intensive Management Objectives for Units 19(A) and 19(B) (5 AAC 92.108)</u>	<u>Current Estimated Moose Population and Harvest (reported and unreported) for Units 19(A) and 19(B)</u>
Population: 13,500 – 16,500 moose Harvest: 750 – 950 moose	Population: 6,800 – 11,300 Harvest: 200 – 300

The current estimate of the moose populations and harvest levels are well below the population and harvest objectives established in 5 AAC 92.108, Identified big game prey populations and objectives. The estimated harvest number provided above includes both reported and unreported moose harvest.

**Predation is an Important Cause for the Failure to Achieve the Population and Harvest Objectives Established by the Board of Game**

The wolf population in Unit 19(A) is estimated at 180-240 wolves in 24-28 packs; that is approximately 1.8-2.4 wolves per 100 square miles. Wolf population estimates are extrapolated from other areas based on average pack size, land area, and estimated prey biomass and also take into account observations of local hunters and trappers, and department observations not associated with wolf surveys. Extrapolated estimates of moose and wolf populations suggest the current moose-to-wolf ratio is between 18:1 and 24:1. Moose can be expected to persist at low densities with little expectation of increase unless moose calf and adult survival improve. These data, information gained from studies on moose mortality in Unit 19(D)-East and other similar areas of Alaska, and observations of local residents suggest that wolves are currently a major limiting factor for moose in the Central Kuskokwim Wolf Predation Control Area.

**Reduction of Predation Provides a Reasonable Expectation of Achieving the Population and Harvest Objectives**

Data from moose mortality and predator/prey studies conducted throughout Alaska and similar areas in Canada suggest that reducing the number of wolves in the Central Kuskokwim Wolf Predation Control Area can reasonably be expected to increase the survival of calf as well as older moose. Mortality studies conducted in Unit 19(D) East have shown that wolves accounted for 37% of calf mortality and 40% of yearling and adult mortality. In terms of the total population, wolves killed approximately 26% of the calf population and 8% of the adult and yearling population annually. Reducing wolf predation on moose, in combination with reducing harvest (particularly of cows), can reasonably be expected to initiate an increase of the moose population towards the population and harvest objectives.

### **The Board Establishes and Recommends the Following:**

1. The first priority for wolf predation control activities in the Central Kuskokwim Wolf Predation Control Area are the areas most important for providing moose for subsistence harvest by residents of the region. In general, Unit 19(A) is the most important for providing moose for subsistence purposes.
2. Methods and means to take wolves may include land and shoot or shooting from aircraft as designated by the Department and in accordance with 5 AAC 92.039. The present Board authorization for airborne or land and shoot taking of wolves is for Unit 19A only.
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.
4. The Department should seek to accomplish an approximate 80% reduction in the wolf population in the Unit 19(A) portion of the Central Kuskokwim Wolf Predation Control Area for a period of 5 years beginning on July 1, 2004. Based on the wolf population estimate of 180-240 wolves, approximately 140-190 wolves should be taken the first year of the program.
5. At no time should the wolf population in the Central Kuskokwim Wolf Control Implementation Area be reduced to fewer than 40 wolves.
6. The Board recognizes that the CKMC recommendation for a wolf predation control program is based on available scientific data that indicates low survival in the moose population and the observations of local residents and other users who report significant declines in the moose population. This is the best information currently available. The Board encourages the Department to continue efforts to obtain additional moose population information to increase knowledge about the population and to evaluate the progress of the wolf predation control program.
7. The Department should establish a program to monitor the wolf population that will make maximum use of data obtained from pilots involved in the wolf reduction program. The Department should also conduct wolf surveys to provide additional assurances that the minimum wolf population will be maintained and to measure the success of the program.
8. The wolf predation control program should be re-evaluated after a 5-year period or when the moose population is estimated to reach the Intensive Management population objectives, whichever occurs the soonest.
9. The Board of Game endorses the Central Kuskokwim Moose Management Plan, as modified by regulatory actions taken in the March 2004 meeting, as a general guide to moose management in Units 19(A) and 19(B). In particular, the Board endorses the mission of the plan to increase the moose population of the Central Kuskokwim region to provide for high levels of human consumptive uses of moose. The Board also endorses the strategy of

restoring hunting opportunities as soon the moose population can sustain additional harvest. The Board recognizes that the Central Kuskokwim Moose Mangement Plan may require revisions in the future as additional information is obtained and implementation of the revised regulations is evaluated.

10. The Board requests that the Department provide a progress report on implementation of wolf predation control in Unit 19(A) and other aspects of the Central Kuskokwim Moose Management Plan at its spring 2005 meeting. At that time, the Board will consider if the present authorization for airborne or same day airborne shooting of wolves is sufficient to achieve the objectives of the Central Kuskokwim Wolf Predation Control Implementation Plan and whether the authorization needs to be expanded to include Unit 19(B) or modified in any other way.

Vote: 6/1  
March 10, 2004  
Fairbanks, Alaska

  
Mike Fleagle, Chair  
Alaska Board of Game

<u>CARIBOU</u>	<u>AREA</u>	<u>FINDING</u> for high levels of human consumptive use
<i>Tok Area</i>		
Chisana 40-mile	southern Unit 12 20D, 20E, 25C	negative positive
<i>Ft. Yukon Area</i>		
Central Arctic Porcupine	Unit 26B 26C, 25A, 25B	positive positive
<i>Galena Area</i>		
Ray Mountains Wolf Mountains Galena Mountains	20F and 24 Unit 21C 21D and 21C	negative negative negative
<i>McGrath Area</i>		
Tonzona Sunshine Mountain Beaver Mountain Rainy Pass Farewell/Big River	Unit 19C 21A and 19D Unit 21A Unit 19C 19C and 19D	negative negative negative negative negative
<i>Delta Junction Area</i>		
McComb	20D	positive
<i>Fairbanks Area</i>		
Delta White Mountain Denali	20A and 13E 20F, 25 and 20B 20C and 13E	positive negative negative

<u>MOOSE</u>	<u>AREA</u>	<u>FINDING</u> for high levels of human consumptive use
<i>Tok Area</i>		
Yukon River 40-mile Unit 12	portion Unit 20E portion Unit 20E Unit 12	negative positive positive
<i>Ft. Yukon Area</i>		
Southern Brooks Range Eastern Yukon Basin Yukon Flats Central North Slope Eastern North Slope	Unit 25A Unit 25B Unit 25D Unit 26B Unit 26C	negative negative positive negative negative
<i>Galena Area</i>		
Lower Nowitna River Unit 21C Yukon River drainage Koyukuk River drainage	Unit 21B Unit 21C Unit 21D Unit 24	negative negative positive positive
<i>McGrath Area</i>		
Mid. Kuskokwim River Up.Holitna,Hoholitna,Aniak R South Fork, Tonzona, Big R Up.Kuskokwim River lowlands Up. Innoko & Nowitna rivers Mid. Yukon River drainage	Unit 19A Unit 19B Unit 19C Unit 19D Unit 21A Unit 21E	positive positive negative positive negative positive
<i>Delta Junction Area</i>		
Unit 20D	Unit 20D	positive
<i>Fairbanks Area</i>		
Unit 20A Unit 20B Unit 20C Unit 20F Unit 25C	Unit 20A Unit 20B Unit 20C Unit 20F Unit 25C	positive positive positive negative negative

ALASKA BOARD OF GAME FINDINGS  
CONTROL OF WANTON WASTE IN THE  
HOLITNA/HOHOLITNA RIVER DRAINAGES  
97-107-BOG

During its March 13 - 23, 1997 meeting in Anchorage, the Board of Game (BOG) heard extensive public testimony and advisory committee reports regarding concern over the ongoing and escalating occurrences of wanton waste in the Holitna/Hoholitna River drainages (HHRD). Based on these reports and additional information provided by Division of Wildlife Conservation and Wildlife Protection staff and considerable deliberation the BOG makes the following findings:

1. Moose population numbers in the HHRD remain unknown, but biological factors indicate that the population is currently healthy and relatively stable. The area also comprises a major migration route and expansion habitat for the growing Mulchatna caribou herd. Both of these populations are highly relied upon and utilized by state residents for subsistence purposes.
2. As referenced in BOG Findings 92-59-BOG, there are at least three distinct human use patterns in the HHRD: Lower Kuskokwim, Middle Kuskokwim, and floater/drifter. In addition, some guided hunting occurs in both Game Management Units 19A and 19B.
3. In recent years there has been a significant increase of observed instances of wanton waste and improper meat salvage by floater/drifter hunters in the area. The duration of floater/drifter hunts ranges from approximately one week in Unit 19B, to an additional two weeks to the next pick-up point in Unit 19A (or three weeks total).
4. The amount of time necessary to complete such a lengthy float is conducive to meat spoilage, especially when the meat has been boned out. Additionally, boning of meat presents a much greater level of difficulty for enforcement personnel to "prove" that an animal was not properly salvaged. The BOG finds these particularly offensive to the state's high regard for harvest of ungulates for their meat as reflected in the laws concerning wanton waste, intensive management and subsistence preference and priority.
5. An increasing component of the floater/drifter use group is comprised of nonresident hunters who have little to no idea how large of an animal a moose is, no frame of reference to realistically judge antler size, and often lack the basic knowledge necessary to properly take care of the substantial amount of meat that one animal provides.

Accordingly, the BOG takes the following regulatory action to address these problems:

- A. A moose or caribou taken in the HHRD in Unit 19B by a hunter accessing the area by aircraft must be transported out of Unit 19B by aircraft.
- B. The edible meat of the front quarters, hindquarters, and ribs (excluding the vertebrae and the pelvis) of any moose or caribou taken in Unit 19B or in the Holitna/Hoholitna Controlled Use Area (HHCUA) must remain on the bone until it has been transported out of Unit 19B or the HHCUA.
- C. A nonresident hunter in Unit 19B must have attended an ADF&G approved hunter orientation course (to include antler size recognition or restrictions and meat care) or must be accompanied by a registered guide or resident family member within second degree of kinship.
- D. Any hunter passing an ADF&G established check station must stop at the check point.

Based on all the information presently available the BOG believes that the above regulations will significantly reduce the level of wanton waste in the HHRD and HHCUA without imposing further access restrictions on other user groups.

Date: April 19, 1997  
Juneau, Alaska

Vote: 7-0

  
Larry Holmes, Chair  
Alaska Board of Game



ALASKA BOARD OF GAME FINDINGS  
ANTLERLESS MOOSE IN 20A  
PROPOSAL 42  
96-103-806

The moose population on the Tanana Flats (GMU 20A) erupted during the 1950s and reached a high by the early 1960s variously estimated at 12,000 to 23,000 animals. During this time, this area became an important moose hunting area for residents of the Fairbanks area. Beginning about 1965, the moose population crashed to about 2,800 moose by 1975. This was attributed to winter weather, including record snowfall in 1970-71, overuse of the range, and poorly regulated hunting, in combination with inadequate monitoring of population trend.

By 1975, it was apparent that wolf predation was limiting recovery of the moose population. The Board implemented a wolf reduction program in 1976 that effectively reduced wolf numbers and allowed moose to increase. Between 1976 and 1996, moose numbers increased from 2,800 to about 14,000. By the mid-1980s, wolf numbers had recovered to pre-control levels but wolf predation was insufficient to limit moose population growth.

Biological information now indicates that if the Tanana Flats moose population increases further, range damage may occur, recruitment may decline as competition for high-quality food increases, and survival will fall. These biological events may precipitate another crash (in conjunction with deep snow) similar to that which occurred in 1965-1975.

After considering public testimony and biological information presented by the Department, the board finds that:

1. Moose populations that increase to high density (generally more than 1.5 moose per square mile in interior Alaska) are at risk for crashes that reduce herd size greatly. Such crashes are precipitated by range damage that may take decades to repair. There are numerous, well-studied case histories of moose populations in Alaska and throughout North America, that document this reality.
2. Crashes of moose populations result in numerous biological and public policy problems as hunters find fewer opportunities to hunt over long time intervals as conservative harvest regulations are required to rebuild the moose populations.
3. Crashes of moose populations are likely preventable if moose populations are carefully monitored, range condition and trend information is available, and harvest regulations are flexible.
4. In order to curb the growth of a moose population approaching carrying capacity, biologists indicate that cow harvests are mandatory. It is not possible to prevent carrying


capacity problems by harvesting only bulls as bull:cow ratios then become distorted and the cow portion of the populations continues to increase.

5. Specifically, with regard to the Tanana Flats moose population, the Board finds that this population, currently at about 14,000 animals, now shows biological signs of approaching carrying capacity. At carrying capacity recruitment is very low, animals are in poor condition, opportunity for harvest is minimal, and range damage may be excessive. Accordingly it is prudent to now consider harvesting a sufficient number of cow moose to slow further population growth. This may involve harvesting up to 1,000 cows.

6. The Board finds that opposition to harvesting cow moose by some local Fish and Game Advisory Committees is strong. Testimony by at least two committees at the March 1996 Board meeting specifically opposed harvesting any cows from the Tanana Flats population, and one committee indicated that it would likely oppose cow moose hunts despite any biological information.

7. The Board finds that there is need for increased public support for harvesting cow moose if we are to fully realize the potential for intensive management that may involve predator reduction programs. Predator control and habitat improvement may result in moose populations that reach high density and subsequently crash, thereby negating efforts to provide maximum hunting opportunity. Cow moose hunts are required to prevent this occurrence, but may be blocked by advisory committee opposition.

8. The Board finds that one way to seek increased support for cow moose hunts is for the Department, the Board, and various interests groups to work closely with advisory committees in order to provide them with adequate information on the risks and benefits of different harvesting strategies. Evidence of this includes the Department's extensive work with local advisory committees that resulted in adoption of Proposal 42A allowing for a limited cow harvest in Game Management Unit 20A in 1996 supported by the advisory committees.

  
Larry Holmes, Chair  
Alaska Board of Game

Date: 4/18/96  
Juneau, Alaska

Vote: 6-0-1  
absent

**SUMMARY OF FINDINGS  
UNIT 19 A & B MOOSE**

The Board of Game heard public testimony, staff reports, advisory committee reports, and discussed the issue of management of moose in Units 19A and 19B on April 1 and April 2, 1992. Based upon all the testimony and reports, both oral and written, the Board makes the following observations and conclusions:

**Biological Findings:**

1. The Board finds that the moose found in the Holitna and Hoholitna river drainages in 19A and 19B are a moose "population." AS 16.05.940 (18). The boundary between 19A and 19B was drawn to reflect different use patterns of the population. The Unit 19A and 19B portions of this population have been subjected to discreet management.

2. The moose population within the Holitna and Hoholitna river drainages in GMU 19A and 19B is of moderate density, increasing in size, and highly productive. Calf:cow ratios in the lower Holitna and Hoholitna rivers in the fall during the past 10 years have averaged about 50-60 calves per 100 cows. Calf:cow ratios in the upper Hoholitna drainage in Unit 19B over this time have averaged about 25 to 30 calves:100 cows.

3. Bull-cow ratios within the 19A portion declined from 60-70 bulls:100 cows to approximately 30 bulls:100 cows during the 1976-1990 period as a result of high hunting pressure. The current ratio remains biologically adequate for productivity and the population sex and age structure provides for high sustained harvests.

4. Bull-cow ratios within the 19B portion remain higher than 19A, reflecting lower hunting pressure.

5. An estimate of the annual moose harvest during the period 1985-1990 for the Holitna and Hoholitna drainage for all types of uses is approximately 300 bulls and 30 cows, which is well within sustained yield limits. Of this estimated harvest, an average of 40-50 bulls were harvested each year by non-residents during this period, with the remainder by Alaska residents.

6. In general, the harvest of moose in the 19A portions of the Holitna and Hoholitna river drainages is predominately by hunters using boats, primarily residents of Units 18 and 19. The harvest of moose in the 19B portions of the Holitna and Hoholitna river drainages is primarily by hunters using aircraft access. Wheel-equipped aircraft are used to access upland areas, and float-equipped aircraft are used to access Whitefish Lake and certain landing and takeoff points along the rivers, including the

confluence of the Holitna with the Kuskokwim, the confluence of the Hoholitna with the Holitna, and other locations downriver from the mouth of the South Fork.

#### Subsistence Use Patterns:

1. The Board of Game found in 1987 that there are subsistence uses of moose in Unit 19, including the Holitna and Hoholitna drainages described above.

2. There are at least three distinct subsistence use patterns for moose in the Holitna and Hoholitna river drainages: a Lower Kuskokwim Use Pattern by hunters from Unit 18, a Middle Kuskokwim Use Pattern by hunters from Unit 19, and a Floater/Drifter Use Pattern by Alaska residents supported by floatplanes. In the Lower Kuskokwim Use Pattern, hunters tend to access 19A and 19B by boats powered by outboard engines often in excess of 70 horsepower, which is part of the means and methods of harvest. In the Middle Kuskokwim Use Pattern, including Sleetmute residents, hunters tend to access the areas by boats with horsepower engines less than 70 horsepower. In the Floater/Drifter Use Pattern, hunters typically access the area by airplanes or transporters combined with float craft.

3. In addition, there is some non-Alaska resident guided hunting in 19A and 19B. Guided hunters typically access the area by airplane, and harvest is predominately large bulls. The number of moose taken by guided hunters in 19A is small; harvest information indicates 7 moose taken by guided hunters for all of Subunit 19A in 1991.

4. The success rate during the fall in 19A and 19B for hunters who are part of the Lower Kuskokwim Use Pattern is about 50%. The success rate during the fall in 19A and 19B for hunters who are part of the Middle Kuskokwim Use Pattern is in the 70% range. The success rate for hunters who are part of the Floater/Drifter Use Pattern is estimated to be about 50%, although there is no detailed information on this group.

5. Hunters from Sleetmute hunt as part of the Middle Kuskokwim Use Pattern. The Department estimated an annual subsistence harvest to be somewhat more than 1 moose per multiperson household during the 1980s. A high estimate of the traditional use level by Sleetmute residents for the 1980s was between 1 to 2 moose per multiperson household, or about 48 moose for the community; however, actual harvest levels fluctuate according to a number of factors including weather and competition from other hunters. The reported harvest during the September season was approximately 12 with an additional 7 taken in the November and February seasons during the 1982-83 season, or about .86 moose per multiperson household. There

probably also were moose taken outside the open moose hunting seasons, but there is no estimate of numbers for Sleetmute. Sleetmute residents have indicated increasing difficulties in hunting moose along the river corridor during the September season.

#### Moose Required for Subsistence Uses:

The Board concludes that there is not a Tier II situation for moose hunting in the Holitna and Hoholitna drainages, as there is a reasonable opportunity for subsistence uses for the Lower Kuskokwim Use Pattern, the Middle Kuskokwim Use Pattern, and the Drifter/Floater Use Pattern. The number of harvested moose necessary to provide for subsistence uses of this moose population for all subsistence uses is within a range that may fluctuate from year to year, and is estimated to be about 300 in the period 1985-90. This is also a reasonable estimate for 1992 based on available information.

#### Subsistence Use Concerns:

There is evidence that the Middle Kuskokwim Use Pattern, particularly for Sleetmute, is being impacted by an increased number of hunters and increased noise and disturbance by hunters in the river corridor of the Holitna and Hoholitna river drainages of 19A and 19B. Most of the increase is by Unit 18 residents who hunt as part of the Lower Kuskokwim Use Pattern. There also may be an increase in hunters who hunt as part of the Floater/Drifter Use Pattern based on reports of local hunters, although the Department has no firm estimate of trends in numbers for this user group. The board received testimony from local residents who perceived that the use of aircraft in Units 19 A and B contributed to disturbance of moose and competition from urban hunters. The board found that the disturbance exists primarily along the river corridor from boat traffic, and that the use of aircraft for access to this population for hunting is not a significant disturbance factor. The major impact on the Middle Kuskokwim Use Pattern has been that there are fewer bull moose available along the Holitna and Hoholitna river corridor. Hunters of the Middle Kuskokwim Use Pattern report having to spend more days afield and spend more money hunting in the fall to obtain moose. A shortfall of fall moose takes are made up to some extent by harvests in the November and February seasons.

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#### Board Regulatory Action:

The board adopted the Holitna-Hoholitna Controlled Use Area (5 AAC 92.540 (e) (2)) at the Spring 1992 board meeting. The board finds that this regulation, combined with the moose hunting seasons for Unit 19 A and B, provide a reasonable opportunity to satisfy the subsistence uses of this moose population. The moose seasons for Units 19 A and B (outside the Lime Village Management area) are as follows:

Unit 19 A (except the Lime Village Management Area):

Resident hunters: Sept. 1 - Sept. 20; Nov. 20 - Nov. 30; Feb. 1 - Feb 10: 1 moose; however, antlerless moose may be taken only during the Nov. 20 - Nov. 30 and Feb. 1 - Feb. 10 seasons.

Nonresident hunters: Sept. 1 - Sept. 20: 1 bull with 50 inch antlers.

Unit 19 B:

Resident hunters: Sept. 1 - Sept. 25: 1 bull.

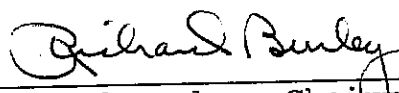
Nonresident hunters: Sept. 1 - Sept 25: 1 bull with 50 inch antlers.

The purpose of the controlled use area is to minimize disturbance along the Holitna - Hoholitna River corridor which has tended to displace moose, especially bull moose, making moose less accessible to subsistence users who rely on river access. The horsepower restriction is intended to limit noise disturbance while still allowing reasonable access by the method primarily used by subsistence users of this moose population. The board is also recommending that the department establish a check station at Whitefish Lake to further document the use pattern for Floater/Drifter hunters and better assess the extent of this use.

Based upon the best available information presented to it, the board believes that the regulations now established for moose hunting of this population will provide a reasonable opportunity for subsistence users of this population to satisfy their subsistence needs.

Dated: April 3, 1992

Location: Anchorage, Alaska

  
Richard Burley, Chairman  
Board of Game

## ALASKA BOARD OF GAME

LETTER OF INTENT REGARDING  
USE OF ALASKA'S GAME FOR RELIGIOUS CEREMONY

The Alaska Board of Game recognizes and respects traditional religious practices of Alaska's Indians, Eskimos, and Aleuts, some of whom use game animal meat during religious ceremonies.

During its March-April, 1980, meeting in Fairbanks, the Board received extensive written and oral testimony from diverse members of the Alaska Native community on proposed regulations that would govern taking of game for meat to be used during religious ceremonies.

The number and variety of religious ceremonies involving use of game meat by Alaska's Natives may vary from group to group, within groups, and from area to area. These variances include:

1. reasons for holding religious ceremonies;
2. a need for different foods for religious ceremony within a region, and from region to region;
3. acceptance of meat from highway kills for ceremonies by some groups or individuals, and objections to such meat from others who say it is not suitable for religious ceremonies;
4. in the case of funeral ceremonies, length of time after death, the number of religious ceremonies held to honor a deceased individual, and the relationship to the deceased (i.e., clan, relatives, friends) of individuals who assume responsibility for arranging religious ceremonies at the time of a death, or at some later date.

In Frank v. State, 604 P.2d 1068 (Alaska 1979), the Alaska Supreme Court held that taking of moose when moose meat is not otherwise available for use in traditional funeral potlatch ceremonies of Alaska's Athabascan people is protected by both the state and federal constitutions--at least where the person taking the moose is sincere in his or her religious beliefs and where the taking will not jeopardize appropriate resource population levels. These constitutional protections also may apply to the taking of other game species by non-Athabascans for use in traditional ceremonies according to the following principles:

1. there must be a religion involved;
2. the conduct in question must be religiously based; and
3. the person claiming constitutional protection must be sincere in his or her beliefs.

Because of the complexity and variety of the traditional religious practices of Alaska's Natives, and in order to protect all of these religious beliefs, the Board concludes that it is preferable at this

time to not adopt regulations governing the taking of game needed for religious ceremony. Such regulations could have an influence on the date, place, time, and extent of some religious ceremonies. Regulations could have an adverse impact on the religious experience.

Before meaningful regulations governing the taking of game for religious ceremony can be adopted, it would be desirable to have an authoritative study of all religious ceremonies in which game meat is used, for all Native groups and subgroups, from all communities in the state where such religious ceremonies are practiced.

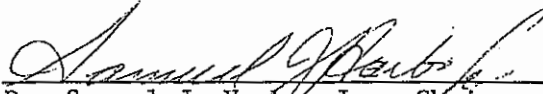
Until definitive guidelines can be established, the Board believes that the taking of game for religious ceremony should be informally administered by the Division of Fish and Wildlife Protection. In the interim, the guidelines established by the court in the Frank case provide sufficient direction for the Division of Fish and Wildlife Protection and the Department of Fish and Game to allow the taking of game for religious purposes.

Game meat used in religious ceremonies that can be scheduled and planned in advance should be obtained during regularly scheduled hunting seasons when feasible and consistent with religious practices and beliefs.

Full cooperation must exist between State officials and Natives who participate in the taking of game to be used in religious ceremonies. To the maximum extent possible and practicable, Native participants should provide advance notice to the nearest Fish and Wildlife Protection office, or official, when a need exists for the taking of game outside of the regular season. In all cases, a full accounting of such game must be made to the Department of Fish and Game after the fact if the nonregulatory approach is to succeed, either as a temporary or a permanent arrangement.

ADOPTED: Fairbanks, Alaska  
April 4, 1980

VOTE: 6/0

  
Dr. Samuel J. Harbo, Jr., Chairman-  
Alaska Board of Game