

ALASKA BOARD OF GAME
Policies and Resolutions

2012

2012-194-BOG	Board of Game Bear Conservation, Harvest, and Management Policy (<i>Policy 2011-186-BOG Revised</i>)
2012-193-BOG	Subunit 26B Muskoxen - Intensive Management Supplemental Findings
2012-192-BOG	Subunit 15C Moose - Intensive Management Supplemental Findings
2012-191-BOG	Subunit 15A Moose - Intensive Management Supplemental Findings
2012-190-BOG	Falconry, Federal Migratory Bird Rulemaking and Delegation of Authority

2011

#2011-189-BOG	Subunits 9C and 9# (Northern Alaska Peninsula Caribou Herd) Intensive Management Supplemental Findings
#2011-188-BOG	Units 9B, 17, 19, and 19B (MCH) Intensive Management Supplemental Findings
#2011-187-BOG	Unit 16 Predation Control Area for Moose Intensive Management Supplemental Findings
#2011-186-BOG	Board of Game Bear Conservation, Harvest, and Management Policy.
#2011-185-BOG	Board of Game Wolf Management Policy (this policy supersedes BOG policy 82-31-GB)
#2011-184-BOG	Game Management Unit 13 Caribou and Moose Subsistence Uses (<i>Supplement findings to 2006-170-BOG</i>)

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#2010-183-BOG	Harvest of Game for Customary and Traditional Alaska Native Funerary and Mortuary Religious Ceremonies
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#2009-182-BOG	Units 12, 20B, 20D, 20E, and 25C Intensive Management Supplemental Findings
#2009-181-BOG	Unit 19D-East Intensive Management Supplemental Findings
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- #2007-173-BOG Nonresident Drawing Permit Allocation Policy – (#162 Revised)
- #2007-172-BOG Annual Reauthorization of Antlerless Moose

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- #2006-171-BOG Resolution supporting a Moratorium on New Zoo Applications
- #2006-170-BOG Unit 13 Caribou and Moose Subsistence Uses
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- #2006-165-BOG Unit 12 and 20E Intensive Management Supplemental Findings
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- #2006-163-BOG Resolution Regarding Declining Fish and Wildlife Enforcement in Alaska
- #2006-162-BOG Nonresident Drawing Permit Allocation Policy
- #2006-161-BOG Finding of Emergency: Predator Control Implementation Plans

2005

- #2005-160-BOG Finding of Emergency: Methods of Harvest for Hunting Small Game in the Skilak Loop Special Management Area of the Kenai National Wildlife Refuge
- #2005-159-BOG Resolution in Support of Allowing Guides to Take Wolves while Under Contract to Clients
- #2005-158-BOG Resolution in Support of Public Education Program on Predator Control
- #2005-157-BOG Reauthorizing Wolf Control in Portions of Unit 13
- #2005-156-BOG Supporting Joint Federal and State Deer Harvest Reporting
- #2005-155-BOG Supporting Governor's Lawsuit Against Federal Government; Extent and Reach of Subsistence Regulations in State Navigable Waters

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- #2004-154-BOG Supporting Increasing Resident and Non-Resident Hunting License and Tag Fees
- #2004-153-BOG Increase FY06 Budget for Boards of Fisheries and Game and State Advisory Committees
- #2004-152-BOG Predator Control in Portions of Upper Yukon/Tanana Predator Control Area
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- #2004-149-BOG Signage for Traplines on Public Lands
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- #2004-147-BOG Bear Conservation and Management Policy
- #2004-146-BOG Americans with Disabilities Act Exemptions

2003

#2003-145-BOG Authorization of Airborne Shooting in Unit 19D East Predation Control Program

#2003-144-BOG Authorizing Wolf Control in Portions of Unit 13

#2003-143-BOG Authorizing Wolf Control in Portions of Unit 13

#2003-142-BOG Resolution of the Alaska Board of Game Concerning a Statewide Bear Baiting Ballot Initiative

#2003-141-BOG Request for Commissioner’s Finding Regarding Same-Day-Airborne Wolf Hunting in Game Management Unit 13

#2003-140-BOG Guidelines for a Unit 19D East Predation Control Program

#2003-139-BOG A resolution of the Alaska Board of Game Concerning Management of Kenai Peninsula Brown Bear Mortality

2002

#2002-138-BOG Request to US Forest Service re: Management of Guided Brown Bear Hunting in Unit 4

#2002-137-BOG Unit 1C Douglas Island Management Area Findings

#2002-136A-BOG Unit 1D Brown Bear Drawing Hunt Finding

#2002-136-BOG Government to Government Relations with Tribes in Alaska

2001

#2001-135-BOG Resolution concerning Unit 19D-East Adaptive Management Team Work

2000

#2000-134-BOG Unit 4 Brown Bear Management Team Findings

#2000-133-BOG Habituation of Wildlife (unsigned – left in draft)

#2000-132-BOG Reaffirm Resolution re: Management of Alaska’s Fish and Game Resources/Ballot Initiative Process

#2000-131-BOG Finding of Emergency: Unit 19D-East (Wolf Control Implementation Plan)

#2000-130-BOG Resolution re: Support of the Conservation and Reinvestment Act of 1999

1999

#99-129-BOG Snow Machine Use in the Taking of Caribou

1998

#98-128-BOG Findings on Elk Management in Region I

#98-127-BOG Findings on Commercial Guiding Activities in Alaska

#98-126-BOG Emergency Findings – Moose in Unit 25B and Unit 25D

#98-125-BOG Emergency Findings – Moose in Unit 21D

#98-124-BOG Emergency Findings – Moose in Unit 18

#98-123-BOG Emergency Findings – Caribou in Unit 9

#98-122-BOG 1998 Intensive Management Findings: Interior Region

#98-121-BOG Findings: HB 168, Traditional Access

#98-120-BOG Resolution re: Ballot Initiative Banning Use of Snares

#98-119-BOG Trapping and Snaring of Wolves in Alaska

#98-118-BOG Customary and Traditional Use of Musk Ox in Northwest Unit 23

1997

#97-117-BOG Customary and Traditional Use of Musk Ox on the Seward Peninsula
#97-116-BOG Dall Sheep Management in the Western Brooks Range
#97-115-BOG Resolution supporting Co-management of Alaska's Fish and Game Resources
#97-114-BOG Resolution re: Dual Management of Alaska's Fish and Game Resources
#97-113-BOG Resolution re: Methods and Means of Harvesting Furbearers and Fur Animals Including Wolves
#97-112-BOG Resolution re: Management of Alaska's Fish and Game Resources/Ballot Initiative Process
#97-111-BOG Finding to Include Unit 22 (except 22C) in the Northwest Alaska Brown Bear Management Area
#97-110-BOG Finding of Emergency re: Stranded Musk Oxen
#97-109-BOG Findings re: Unit 16B-South Moose
#97-108-BOG Resolution re: Subsistence Division Budget
#97-107-BOG Findings re: Wanton Waste on the Holitna and Hoholitna Rivers

1996

#96-106-BOG Delegation of Authority re: Issuing Permits to Take Game for Public Safety Purposes
#96-105-BOG Delegation of Authority to Implement Ballot Measure #3
#96-104-BOG Finding of Emergency re: Western Arctic Caribou Herd
#96-103-BOG Findings – Antlerless Moose in Unit 20A
#96-102-BOG Findings – Nelchina Caribou Herd Management
#96-101-BOG Findings – Intensive Management for GMU 19D East
#96-100-BOG Establishment of the Nenana Controlled Use Area
#96-99-BOG Moose Populations in Unit 26A
#96-98-BOG Taking Big Game for Certain Religious Ceremonies
#96-97-BOG Forty Mile Caribou Herd Management Plan
#96-96-BOG Finding of Emergency – Moose in Remainder of Unit 16B

1995

#95-95-BOG Resolution – Wildlife Diversity Initiative
#95-94-BOG Resolution – Change Name of McNeil River State Game Refuge to Paint River State Game Refuge
#95-93-BOG Requiring License Purchase in advance
#95-92-BOG *Open Number*
#95-91-BOG Delegation of Authority – Comply with Alaska Supreme Court Opinion in Kenaitze vs. State
#95-90-BOG Board Travel Policy
#95-89-BOG Findings – Noatak Controlled Use Area
#95-88-BOG Delegation of Authority to Increase Bag Limits in Unit 18 for Mulchatna and Western Arctic Caribou Herds
#95-87-BOG Subsistence Needs for Moose in Unit 16B

#95-86-BOG Findings on Intensive Management in Unit 19D
 #95-85-BOG Findings on Intensive Management in Unit 20D
 #95-84-BOG Findings on Intensive Management in Unit 13
 #95-83-BOG Resolution: Subsistence Use on National Park Lands
 #95-82-BOG “No Net Loss” Policy for Hunting and Trapping Opportunities
 #95-81-BOG Resolution: Remove Federal Management of F&W on Public Lands and Waters
 #95-80-BOG Resolution to Legislature to Define Subsistence

1994

#94-80A-BOG Wolf Predation Control Program in Unit 20A
 #94-79-BOG Delegation to Commissioner to Adopt Regulations Resulting from Kenaitze Decision which Invalidates Nonsubsistence Areas
 #94-78-BOG Addendum to Findings on Unit 16B Moose
 #94-77-BOG Resolution on SB325 (Repeal Antlerless Moose Statute)

1993

#93-76-BOG Findings on McNeil River Refuge Bears
 #93-75-BOG Resolution on Adak Caribou
 #93-74-BOG Delegation of Authority for Permits to Take Furbearers with Game Meat
 #93-73-BOG Delegation of Authority to Make Emergency Regulations Permanent, Moose in Unit 19D
 #93-72-BOG Wolf Control Findings – Delta Area
 #93-71-BOG Resolution on Round Island Walrus Hunt
 #93-70-BOG Findings on Unit 16B Moose Seasons and Bag Limits
 #93-69-BOG Resolution on Popof Island Bison
 #93-68-BOG Resolution on Commercialization of Moose
 #93-67-BOG Resolution on Elk Transplants in Southeast
 #93-66-BOG Resolution on Clear-cut Management in the Tongass National Forest

1992

#92-65-BOG Findings in Units 12, 20B, D, and E on Wolves
 #92-64-BOG Findings in Unit 20A Wolves
 #92-63-BOG Findings in Unit 13 Wolves
 #92-62-BOG Findings Wolf Area Specific Management Plans for Southcentral and Interior
 #92-61-BOG Resolution on Unit 13 Moose
 #92-60-BOG Findings Unit 13 Moose Seasons and Bag Limits
 #92-59-BOG Findings Unit 19 A&B Moose – Holitna and Hoholitna Controlled Use Area
 #92-58-BOG Findings on Kilbuck Caribou re Fall Hunt
 #92-57-BOG Report of the Board of Game, Area Specific Management Plans for Wolves
 #92-56-BOG Relating to Moose in GMUs 19A and 19B per Superior Court order in Sleetmute vs. State
 #92-55-BOG Relating to Endorsement of State Closure of Deer Hunting in GMU 4 and Requesting Federal Closure

1991

#91-54-BOG Findings on Strategic Wolf Management Plan
#91-54a-BOG Relating to Kilbuck Caribou Management Plan
#91-53-BOG Relating to Taking of Walrus from Round Island by Residents of Togiak
#91-53a-BOG Board Direction to Committee for Strategic Wolf Plan
#91-52-BOG Findings on Unit 13 Moose Season and Bag Limits

1990

#90-51-BOG Findings on Strategic Wolf Management Plan
#90-50-BOG Relating to Kilbuck Caribou Management Plan
#90-49-BOG Findings on Kwethluk Emergency Caribou Hunt Petition
#90-48-BOG Relating to the Use of Furbearers by Rural Alaskans, Including Alaska Natives
#90-47-BOG Relating to the Commercialization of Moose and other Wildlife
#90-46-BOG Relating to Destruction of Moose by the Alaska Railroad

1989

#89-45-BG Delegation of Authority to Adopt Waterfowl Regulations

1988

#88-44-BG Delegation of Authority for March 1988 Meeting
#88-43-BG Resolution Supporting Funding for Division of Game

1987

#87-42d-BG Procedures for Delegations of Authority (Replacing #75-2-GB)
#87-42c-BG Delegation of Authority to Correct Technical Errors
#87-42b-BG Delegation of Authority to Correct Technical Errors Before Filing Regulations
#87-42a-BG Delegation of Authority to Adopt Emergency Regulations (Replacing #75-3-GB)

1986

#86-41-BG Finding of Emergency: New State Subsistence Law
#86-40-BG Delegation of Authority

1985

#85-39-GB Resolution on Resources v/s Logging
#85-38-GB Findings: Madison vs. State Requirements
#85-37-GB Lime Village Management Area Findings
#85-36-GB Findings: Waterfowl hunting in and near Palmer Hayflats

1984

#84-35-GB Resolution on Waterfowl Stamp
#84-34-GB Transplant of Musk Ox to Nunivak Island

1983

#83-33-GB Resolution on Guide Board
#83-32-GB Findings on Moose in GMU 16B

1982

#82-31-GB Supplement to Wolf Population Control

1981

#81-30-GB Findings and Policy Regarding Nelchina Caribou
#81-29-GB Finding and Policy for Future Management of the Western Arctic Caribou Herd
#81-28-GB Letter of Intent: Wolf Reduction in Alaska

1980

#80-27-GB Letter of Intent Regarding Use of Alaska's Game for Religious Ceremony
#80-26-GB Findings and Policy Regarding Bowhunting
#80-25-GB Standing Committee II on Deer
#80-24-GB Regarding Advisory Committee Coordinators

1979

#79-23-GB Authorization to Export Animals from Alaska
#79-22-GB Staff Directive to Subsistence Section
#79-21-GB Relating to Brown Bear in GMU 4
#79-20-GB Relating to Brown Bear in GMU 4
#79-19-GB Brown Bear, GMU 4
#79-18-GB Relating to Muskoxen

1978

#78-18-GB Statement of Direction: Use of Airplanes in Controlling Predation by Wolves
#78-17-GB Relating to (d)(2) Legislation, State's ability to Manage Fish & Wildlife Resources
#78-16-GB Relating to (d)(2) Legislation, State's ability to Manage Fish & Wildlife Resources

1977

#77-15-GB Delegation of Authority to Commissioner to Address Petitions
#77-14-GB Repeal of Regulations Relating to Registration of Camps by Guides for Hunting Bears
#77-13-GB Regarding Closed Season for Caribou (rescinded November 30, 1977)
#77-12-GB Regarding the 17(d)(2) Land Settlement

1976

#76-11-GB Trapping Wolves by ADF&G

#76-10-GB Request for Public Safety Involvement in Enforcement of Caribou Regulations
#76-9-GB Management Goal: Western Arctic Caribou
#76-8-GB Export of Live Game Animals Outside of Alaska
#76-7-GB Muskox to Anchorage Children's Zoo (rescinded November 30, 1977)
#76-6-GB Taking of Wolves by Helicopter
#76-5-GB Regarding the Taking of Wolves in Units 23 and 26A

1975

#75-4-GB Endorsement of Trapping as a Legitimate Use of Renewable Resources
#75-3-GB Delegation of Authority to Adopt Emergency Regulations (See #87-42a-GB)
#75-2-GB Procedures for Delegations of Authority (See #87-42d-GB)
#75-1-GB Effectuating Delegation of Authority

**Findings of the Alaska Board of Game
2012-194-BOG**

**BOARD OF GAME BEAR CONSERVATION, HARVEST,
AND MANAGEMENT POLICY**

Expiration Date: June 30, 2016

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 62nd 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 km² (450 bears/1,000 mi²). A population in Katmai National Park on the Alaska Peninsula was measured at 550 bears/1,000 km² (1,420 bears/1,000 mi²). In most interior and northern coastal areas, densities do not exceed 40 bears/1,000 km² (100 bears/1,000 mi²). Mean densities as low as 4 grizzly bears/1,000 km² (12 bears/1,000 mi²) 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 km² (175 bears/1,000 mi²) on the Yukon Flats to 289 bears/1,000 km² (750 bears/1,000 mi²) 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 km² (4,000 black bears/1,000 mi²).

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 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.

Vote: 6-1

January 18, 2012

Anchorage, Alaska



Cliff Judkins, Chairman
Alaska Board of Game

**Findings for the Alaska Board of Game
2012-193-BOG
Unit 26B Muskoxen Findings
January 18, 2012**

The Board of Game finds as follows, based on information provided by Department staff, Alaska residents and other users of muskoxen in Unit 26(B). These findings are supplemental to the findings set forth in 5AAC 92.126.

1. Unit 26(B) muskoxen are not managed intensively for high levels of human harvest, but they are managed to provide hunting opportunities. The population objective is a minimum of 300 muskoxen \geq 1 year old during April surveys. The harvest objective is 3–9 muskoxen annually, once the population reaches 300 and a harvestable surplus is available.
2. The Unit 26(B) muskox population and harvest objectives are not being met. The muskoxen population size was estimated at 190 in April 2011 which is below the population objective of 300. The hunting season for Unit 26(B) muskoxen has been closed since regulatory year 2006–2007 because there is no harvestable surplus.
3. Predation by brown bears was identified as a primary source of mortality on muskoxen and is an important cause of the failure to achieve the population and harvest objectives. During 2007–2011, brown bear predation was identified as the primary source of mortality. Sixty-two percent of the documented total adult muskoxen mortality ($n=73$) was attributed to brown bear predation, which accounted for an average of 9 adult muskoxen deaths annually. During the same time period, 58 percent of documented calf mortality ($n=45$) was caused by brown bear predation. This resulted in an annual average of 5 calves known to be preyed on by brown bears.
4. During 2007–2011, the habitat appeared capable of supporting a larger muskoxen population. Captured muskoxen were generally in good condition, and birth rates were sufficient to provide for population growth, but growth was not realized because of poor survival.
5. Reducing predation can reasonably be expected to aid in achieving the objectives. During 2004–2011, the population remained relatively stable at around 200 muskoxen. Evidence indicates that the number of yearlings being recruited annually approximately equaled the number of adult muskoxen dying annually. If survival rates of either adult muskoxen or calves increase, then the muskoxen population is expected to increase. Reducing predation on adults and calves should change survival rates of one or both. During 1987–1995, the annual rate of increase for the entire population was 7%. This time period should be representative of what the population growth rate Unit 26(B) muskoxen could experience if bear predation is reduced and habitat is not limiting.
6. Reducing predation is likely to be effective given land ownership patterns. Most of Unit 26(B) is state land; the land ownership pattern is 69 percent state, 29 percent federal, and 2 percent private. Of the 29 percent federal lands, 12 percent is Bureau of Land Management,

and these lands are available for bear control. Total land available for bear control is 72-74 percent of the unit.

7. Reducing predation is in the best interests of subsistence users because no harvest is currently taking place. An increase in the population that results in sustainable harvest will benefit all Alaska residents.
-

Vote: 7-0
January 18, 2012
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

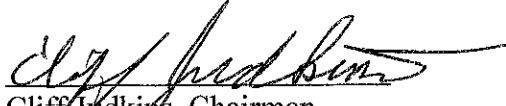
**Findings for the Alaska Board of Game
2009-181-BOG**

**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

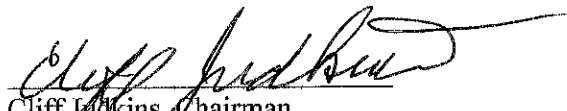
**Findings for the Alaska Board of Game
2009-180-BOG**

**Unit 19A 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 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 and 2006-168-BOG.

1. The moose population size, currently estimated to be 3,200-5,275 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), 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 8 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: 5-0-2
March 9, 2009
Anchorage, Alaska


Cliff Jenkins, Chairman
Alaska Board of Game

APR 01 2008

BOARDS

**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.
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.
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

**Findings for the Alaska Board of Game
2008-176-BOG**

**Units 16A and 16B Intensive Management Supplemental Findings
March 21, 2008**


The Board of Game finds as follows, based on information provided by Department staff, Alaska residents and users of moose in Units 16A and 16B. These findings are supplemental to the findings set forth in 2006-167-BOG, 2006-164-BOG, 5AAC 92.108, and in the predator control implementation plan in 5AAC 92.125(d).

1. The moose population size, currently estimated to be 3193-3951 moose in Unit 16B, is less than the population objective of 6,500-7,500 moose. The population objective has not been achieved for at least the last 11 years.
2. The unit 16B moose harvestable surplus, as described in 5AAC 92.106(3) (A), currently (2008) estimated at 171 bulls, is less than the harvest objective of 310-600 moose. The harvest objective has not been achieved for at least 8 years.
3. The unit 16B moose population is, thus, depleted and reduced in productivity, which has resulted in a significant reduction in the allowable human harvest of the population.
4. Enhancement of abundance or productivity of moose is feasibly achievable utilizing the recognized and prudent active management techniques of predator control.
5. The Board has repeatedly, since 1990 been required to significantly reduce the taking of moose in Unit 16B 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 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. Subpopulations of moose from Unit 16B winter in portions of Unit 16A where predation by wolves is an important cause of mortality and objectives are unlikely to be achieved, in the foreseeable future unless predator control is conducted western Unit 16A.
8. Subpopulations of moose from Unit 16B also calve in portions of Unit 16A where predation by wolves and black bears are important causes of mortality 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.

9. Reducing predation in Units 16A and 16B can reasonably be expected to achieve the population and harvest objectives of moose in Unit 16B.

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


Cliff Judkins, Chairman
Alaska Board of Game

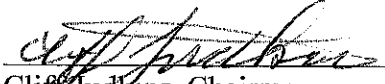
**Findings for the Alaska Board of Game
2008-175-BOG**

**Unit 9D (Southern Alaska Peninsula Caribou Herd)
Intensive Management Supplemental Findings
March 6, 2008**

The Board of Game finds as follows, based on information provided by Department staff, Alaska residents and users of caribou in Unit 9D. These findings are supplemental to the findings set forth in 5AAC 92.108.

1. The caribou population size, currently estimated to be 600 caribou, is less than the population objective of 4,000 – 5,000. The population objective has not been achieved for at least the last five years.
2. The Unit 9D caribou harvestable surplus, as described in 5 AAC 92.106(3)(A), is currently estimated at zero, which is less than the harvest objective of 200 – 500. The harvest objective has not been achieved for at least the last 7 years.
3. The Unit 9D caribou population is depleted due to poor recruitment, and has already resulted in a complete hunting closure so that there is no human harvest of the population.
4. Increases in abundance and productivity are achievable utilizing the recognized and prudent active management technique of predator control.
5. The bull ratio of 15 bulls per hundred cows and the increasing age of the cows in the herd cause concern that the herd may no longer be viable in another year or two, and recovery will be difficult unless immediate action is taken. Collared cow caribou have shown a 79% to 85% pregnancy rate. However, calf survival during the first four weeks after birth has resulted in a survival rate between 0.5 to 1 calf per 100 cows by October.
6. The population and harvest objectives have not been achieved, at least in part, because wolf 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 achieving the population and harvest objectives.

Vote: 6-0-1
March 8, 2008
Fairbanks, Alaska

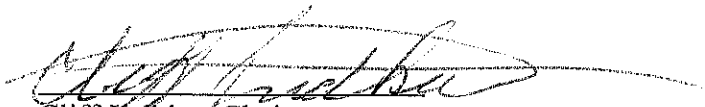

Cliff Judkins, Chairman
Alaska Board of Game

**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

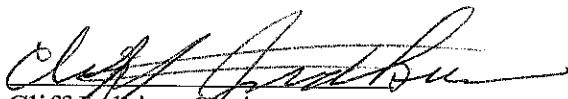
Vote: 6-0-1
March 5, 2008
Fairbanks, Alaska

Finding for the Alaska Board of Game
2007-173-BOG

Nonresident Drawing Permit Allocation Policy
March 12, 2007

At the March 2007, Southcentral/Southwest Region meeting in Anchorage, the Board of Game modified the Nonresident Drawing Permit Allocation Policy, #2006-162-BOG, by adding item #4 to the guidelines that shall be applied when determining the allocation percentage for drawing permits to nonresidents:

1. Allocations will be determined on a case by case basis and will be based upon the historical data of nonresident and resident permit allocation over the past ten years.
2. Each client shall provide proof of having a signed guide-client agreement when applying for permits.
3. Contracting guides shall be registered in the area prior to the drawing.
4. When a guide signs a guide-client agreement, the guide is providing guiding services and therefore must be registered for the use area at that time.


Cliff Judkins, Chairman
Alaska Board of Game

Vote: 7-0
Amended: March 12, 2007
Anchorage, 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.

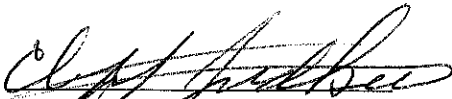
Policy for yearly authorization of Antlerless Moose Hunts by the Board of Game

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 Judkins, 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".

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

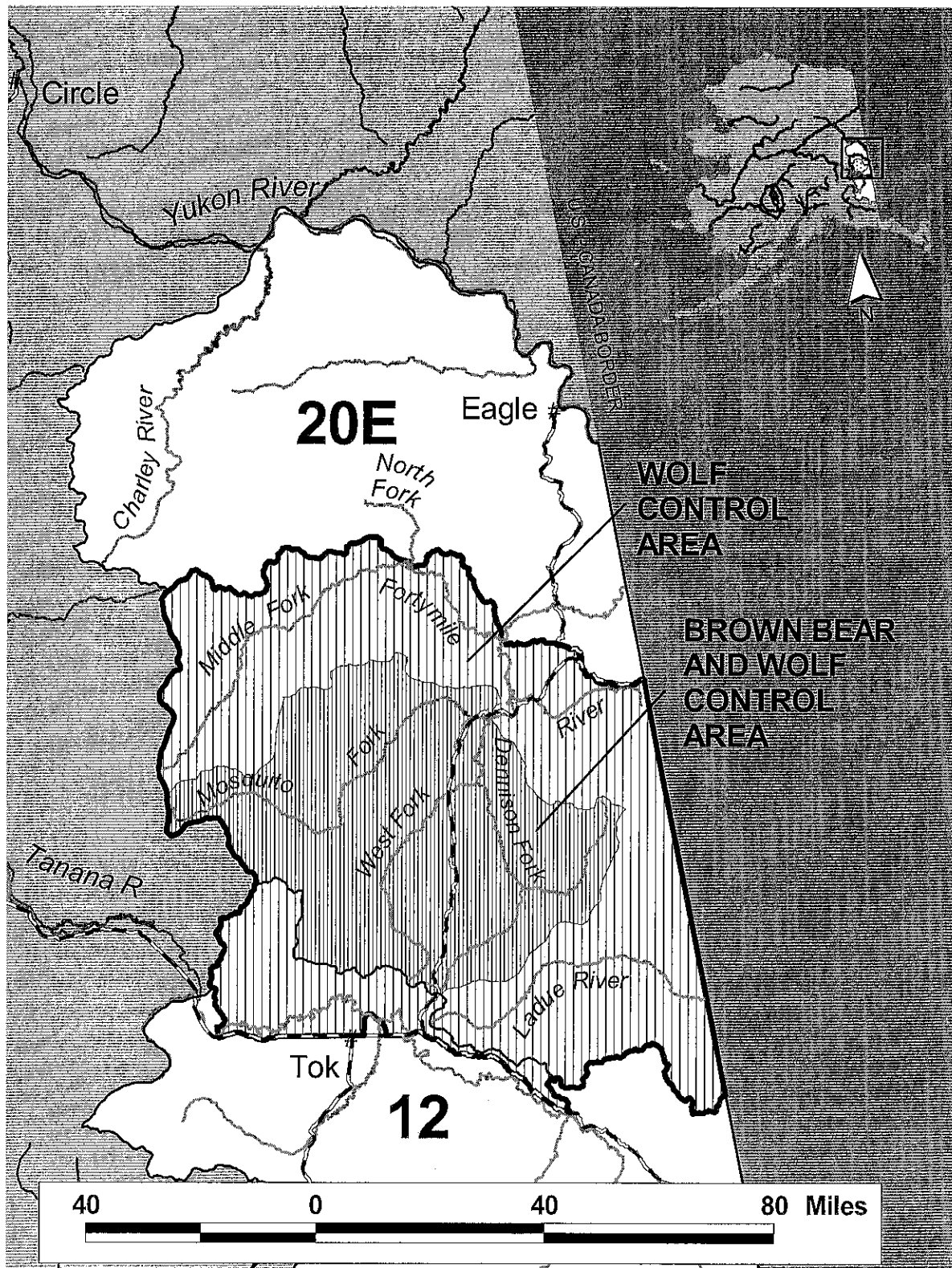
The Upper Yukon/Tanana Wolf and Brown Bear Predation Control Area includes both Units 12 (approximately 10,000 mi²) and 20(E) (approximately 10,680 mi²). The Board has identified moose populations in Unit 12 and that portion of Unit 20(E) drained by the Fortymile and Ladue Rivers (approximately 6,700 mi²) 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 mi². 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 mi² (Figure 1).

Background

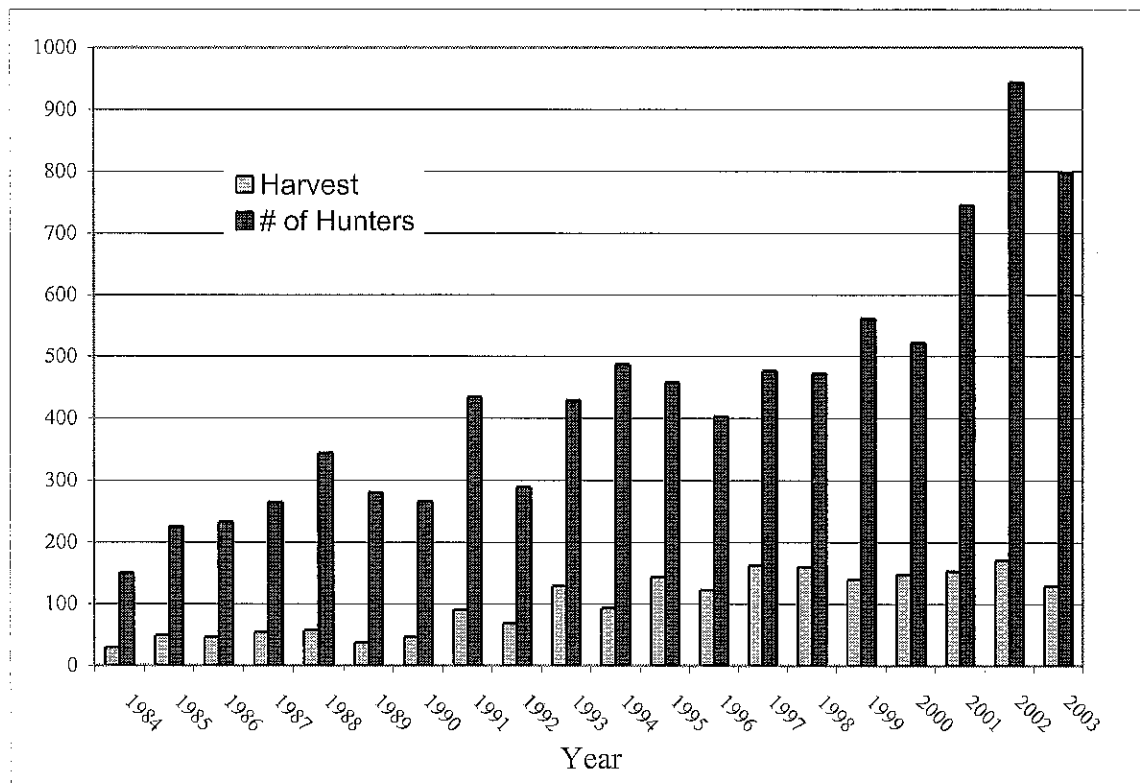
Unit 20(E) encompasses several drainages of the upper Yukon River and includes the communities of Chicken, Boundary, Eagle, Eagle Village and other smaller settlements. Moose in the unit are an important subsistence resource for these communities, for the adjacent communities of Tanacross, Tok, Tetlin, 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.



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 mi²) and northwestern Unit 12 (approximately 600 mi²) 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.

- ii. 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.
 - iii. A person may not use bait or scent lures within one-quarter mile of a publicly maintained road or trail.
 - iv. 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.
 - v. 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.
 - vi. A person using bait shall remove bait, litter and equipment from the bait station site as required by the control permit.
5. At no time shall the number of brown bears in the control area be reduced by more than 60% of the extrapolated precontrol estimate of 135 present during June (leaving approximately 54). Estimates are based on extrapolations from past research in Unit 20(E) and in similar habitats with similar bear food resources in Unit 20(A). 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.
6. Pending legislative approval, the Department should establish a financial incentive program for permittees who take brown bears. The program should give permittees the option to surrender fleshed and salted hides to the Department for sale at its annual hide auction, and then be reimbursed for the sale price of the hide, minus handling charges incurred by the Department.
7. The wolf and brown bear 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 first. Interim, annual reports will be presented to the Board of Game at spring meetings.

Vote: 6 - 1
November 5, 2004
Juneau, Alaska


Mike Fleagle, Chair
Alaska Board of Game

**Findings of the Alaska Board of Game
2004-151-BOG**

**Finding regarding Bear Baiting Allocation
March 10, 2004**

The Alaska Board of Game hereby finds that the board is tasked with and responsible for the allocation of the wildlife resources of the State of Alaska,

Black bears have proved to be a popular species for hunting and viewing via a number of methods, including baiting, across the State,

Population and harvest objectives for species important for human use, particularly for food, may be attainable without drastic bear control measures if a considerable number of bears are taken by bear baiters,

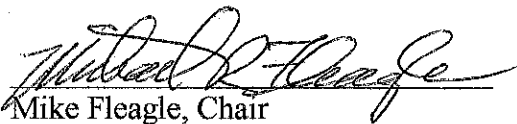
Approximately 650 black bears are currently harvested over bait in Alaska each year,

The harvest of black bears using bait has important economic benefits to the state including business for guide/outfitters and transporters, taxidermy, tanning, sale of handicraft items, sale of equipment for both archery and firearm hunters and more directly, from the sale of licenses and tags by the state,

The Boards of Fisheries and Game routinely allocate fish and game resources to user groups which are based upon the method of take.

The Alaska Board of Game has allocated at least 1,000 bears to bear baiters, for harvest in eighteen (18) Game Management Units across the state where regulations have been developed specifically to allow for such harvest.

Vote: 7/0
March 10, 2004
Fairbanks, Alaska



Mike Fleagle, Chair
Alaska Board of Game

**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 mi², 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 mi².

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^2 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^2 . 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.

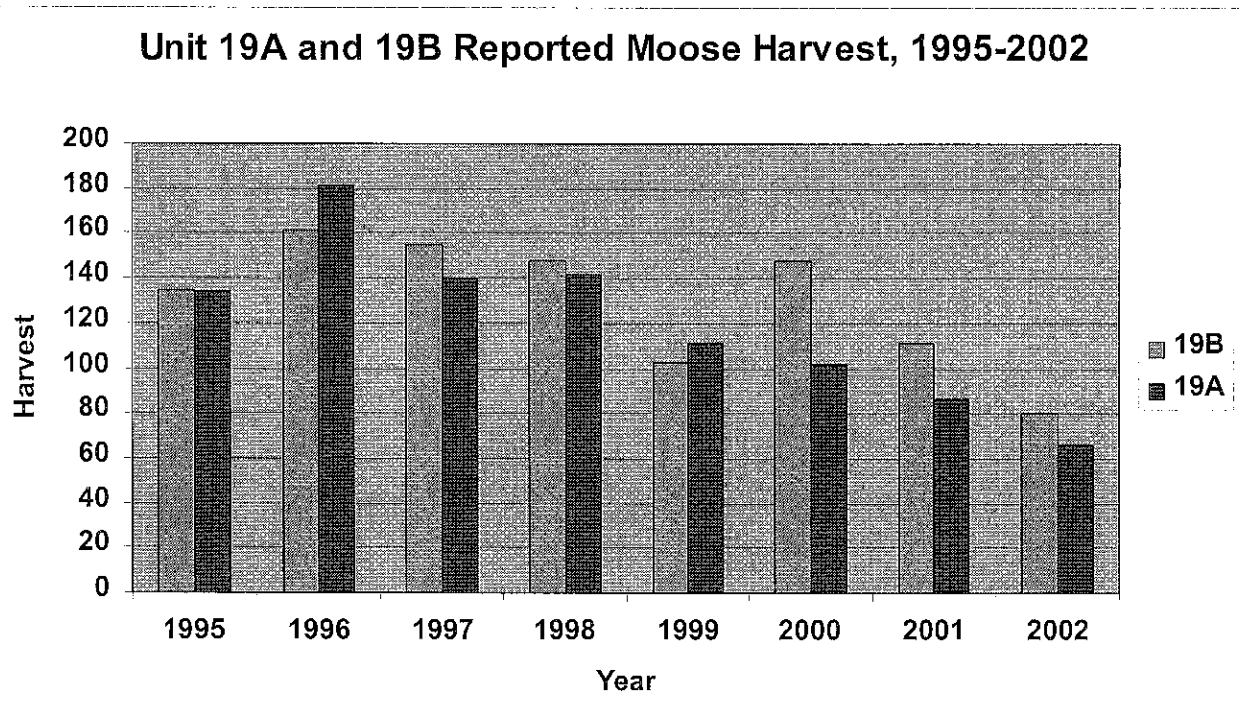


Figure 1. Decline in reported moose harvest in GMUs 19(A) and 19(B) since 1995.

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

**Findings of the Alaska Board of Game
2004-147-BOG**

**BOARD OF GAME BEAR CONSERVATION AND MANAGEMENT POLICY
MARCH 8, 2004**

GENERAL BEAR MANAGEMENT

Purposes of Policy

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

Goals

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

Background

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

Brown/grizzly bears are found throughout their historic range in Alaska, and unlike populations in the contiguous 48 states, they are not considered a threatened or endangered species. Estimating precise population numbers is difficult because of the bears' secretive habits and often densely vegetated habitat, but in most places in the state, populations are considered stable or increasing. Throughout most coastal habitats where salmon are abundant, bear densities typically exceed 175 bears/1,000 km² (450 bears/1,000 mi²). A population in Katmai National Park on the Alaska Peninsula was measured at 550 bears/1,000 km² (1,420 bears/1,000 mi²). In most interior and northern coastal areas, densities do not exceed 40 bears/1,000 km² (100 bears/1,000 mi²).

Densities as low as 7 bears/1,000 km² (20 bears/1,000 mi²) have been measured in the eastern Brooks Range. Extrapolations from existing density estimates yielded an estimate

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

American black bears (*Ursus americanus*) are generally found in forested habitats throughout the state. Black bears also occupy their historic range in Alaska, often overlapping distribution with brown/grizzly bears. Because they live in forested habitats it is very difficult to estimate population size or density. Where estimates have been conducted in interior Alaska, densities ranged from 67 bears/1,000 km² (175 bears/1,000 mi²) on the Yukon Flats to 289 bears/1,000 km² (750 bears/1,000 mi²) 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 km² (4,000 black bears/1,000 mi²). A statewide black bear population estimate is not available because, unlike the many brown/grizzly bear and wolf estimates that are available across the state, very few black bear population estimates have been conducted.

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

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

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

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

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

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

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

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

Guiding Principles

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

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

Conservation and Management

A. Management Strategies

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

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

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

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

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

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

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

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

B. Research Strategies

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

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

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

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

C. Information and Education Strategies

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

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

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

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

BEAR PREDATION MANAGEMENT

Purpose of Policy

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

Goals

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

Background

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

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

Guiding Principles

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

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

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

Management Strategies

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

Research Strategies

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

Information and Education Strategies

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

Board Consideration

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

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

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

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

- A statement of the proposed action, including potential methods and means.
- Justification for the proposed action, including previous measures taken that failed to achieve bear and prey objectives and other alternatives considered.
- Geographical description of the area.
- Population and human use objectives.
- Relevant information about wildlife populations and human use, including bear and prey populations status and trend, harvest information, habitat, and estimates of the effects of all predators on prey populations.
- Estimate of the time and funding necessary to meet population and human use objectives.
- Schedule for update and reevaluation of the program.

If a bear control program is authorized by the Board, a specific predator control implementation plan will be prepared that includes:

- Justification
- Geographic area description
- Wildlife population and human-use information
- Bear and Prey population level and population objectives and the basis for those objectives
- Methods and means
- Anticipated time frame not to exceed five years unless the plan is re-adopted, and a schedule for update and reevaluation
- Other specifications or limitations the Board considers necessary.

Bear control will be implemented using the most humane, selective, acceptable and effective methods available. If methods that do not require killing bears are found to achieve the desired results in a reasonable time and with reasonable financial resources, they will be considered first. At no time will poisons be used for bear control.


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

Under methods and means the Board may selectively consider:

- Relocation
- Sterilization
- Use of communications equipment between hunters or trappers

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

Vote: 7/0
March 8, 2004
Fairbanks, Alaska


Mike Fleagle, Chair
Alaska Board of Game

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

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

Purpose

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

Identified big game prey population and wolf predation control area

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

Failure to meet moose harvest objective

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

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

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

Status of moose population

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

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

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

Predation an important cause for failure to achieve harvest objective

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

Reduction of predation provides reasonable expectation of achieving harvest objective

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

The Board establishes the following:

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

- 2) Methods and means to take wolves will be designated by the Department in accordance with 5 AAC 92.039;
- 3) Permits shall be issued to members of the public qualified to operate within the constraints of the program, and able to accomplish the objectives of the program, as designated by the Department.

Vote: 710

December 15, 2003

Fairbanks, Alaska (teleconference)



Mike Fleagle, Chair
Alaska Board of Game

**Findings of the Board of Game
2003-140-BOG**

**Guidelines for a Unit 19D East Predation Control Program
March 12, 2003**

I. Overview Of Project Development And Actions Taken to Date

- A. History of Public Process: The Board of Game has a long history of considering issues related to increasing the harvest level of moose in Unit 19D East to improve the well being of people who depend heavily on moose for food. In addition, the Adaptive Wildlife Management Team conducted a public process. Some of the key activities in this process have been:
1. March 1995: Under the state's Intensive Management statute (AS16.05.255(e)-(g)), the Board determined that human consumptive use is the preferred use of moose in Unit 19D East (5AAC 92.108).
 2. Fall 1995: The Board established a wolf predation control area in Unit 19D East and authorized the Commissioner to reduce wolf numbers during 1996-2001 (5AAC 92.15(1)).
 3. January 2000: The Board made a finding of emergency regarding the Unit 19D East situation and updated the wolf control implementation plan and extended the Commissioner's authority to reduce wolves for 2000-2005.
 4. February 2001: The Adaptive Wildlife Management Team (AWMT) released its report that included recommendations to proceed with actions to control predation by both wolves and black bears in a portion of Unit 19D East in the McGrath area called an Experimental Micro Management Area (EMMA).
 5. March 2001: The Board of Game supported the AWMT report (Resolution 2001-135 BOG) and among other recommendations, urged the Department "begin predator control as soon as possible."
 6. May 2001: The Board of Game adopted several regulations to begin implementing the recommendations of the AWMT (see list of actions taken under I. D. below).
 7. October 2001: The AWMT reaffirmed their recommendations for control of predation by both wolves and black bears in the EMMA, provided more specific recommendations on wolf and black bear predation control methodology, and also recommended further public review and comment on the project.
 8. February 2003: The Board of Game announced its intentions to reactivate development of an action plan for Unit 19D East, incorporating new research data, and inviting public review and comment.
- B. National Academy of Sciences Report: The findings of the National Academy of Sciences, National Research Council report titled, "Wolves, Bears, and Their Prey in Alaska," are considered in the development of the Unit 19D East research and management program as well as in the AWMT report and recommendations.

C. Research Program: Two years of intensive research in Unit 19D East began in March 2001 focusing on:

1. Moose and wolf population numbers;
2. Mortality of calves and adult moose;
3. Winter moose habitat quality, quantity and availability;
4. Condition of moose; and
5. Movement patterns of moose in the area.

D. Management Actions Already Taken

1. The Department conducted wolf trapping and bear baiting clinics in McGrath and associated villages to encourage local residents to increase harvests of wolves and bears.
2. The Board of Game:
 - a. Liberalized black bear baiting regulations to include both spring and fall seasons in Unit 19D East.
 - b. Reduced the length of moose hunting seasons.
 - c. Closed the winter moose season.
 - d. Established a registration permit hunt to help reduce harvest and better track harvest levels.
 - e. Expanded the Upper Kuskokwim Controlled Use Area to prohibit use of aircraft for hunting moose in a large portion of Unit 19D East.
 - f. Excluded non-resident hunters from moose hunting in Unit 19D East.
 - g. Reduced Intensive Management moose population and harvest objectives to be more achievable.
 - h. Authorized use of snowmachines to take wolves in Unit 19.

E. Additional Hunting Restrictions To Be Applied During Predator Control: Local residents agreed that hunting in the EMMA will be closed while the Department conducts predation control activities.

II. Findings of the Board of Game

- A. Research conducted by the Division of Wildlife Conservation has given the Board a much clearer picture of moose population dynamics and interactions with predators in the McGrath area. Current information is sufficient to make management decisions. On-going research will contribute to the scientific knowledge base, consideration of adaptations that may be needed as the program proceeds, and the applicability of the EMMA approach to other similar situations.
- B. Data from the on-going research program in Unit 19D East demonstrates that wolves prey on moose year round, and in addition, predation from black bears and grizzly bears is a major source of mortality to moose calves.
- C. Local residents and many other Alaskans are very frustrated about the lack of action to implement a control program. This lack of action has occurred despite the longstanding approval and repeated affirmation of the Board of Game to use predation control to attain harvest management objectives.
- D. Local residents have already demonstrated a willingness to compromise on issues related to rebuilding the moose population in McGrath by agreeing to reductions on hunting.
- E. Registered guides have indicated support for predator management activities, even though they recognize that opportunities to guide non-resident moose hunters do not currently exist in the area and may not for some time.
- F. The Board is obligated to follow the Alaska Constitution (Article 8, sections 4 & 17) and the Intensive Management Statute requirements of managing the moose population for high levels of human consumptive uses, even though intense opposition to predator control is voiced from some segments of the public.

III. Board of Game Recommendations

- A. The current Board of Game concurs and reaffirms the findings of previous boards that human consumptive use is the preferred use of moose in Unit 19D (95-86-BOG, Resolution 2001-135 BOG) and that predation control in the McGrath area is necessary to help restore the abundance of the moose population to provide for human harvest. This includes control of predation by wolves, black bears, and grizzly bears. Predation control activities should be conducted as quickly and effectively as possible.
- B. The Board recognizes local concerns and endorses an experimental predator management program in Unit 19D East.
- C. The Board recognizes that the current Unit 19D East Intensive Management population objective (3,000 to 3,500 moose) and harvest objective (130 to 150 moose) recommended by AWMT are conservative. The previous population objective was 6,000-8,000 moose, and the previous harvest objective was 300-400 moose. The Board requests the Department to re-examine these numbers. If appropriate, the Board will revise the objectives at a later meeting.

- D. The Board recognizes that the EMMA concept of controlling predation in a small area near rural communities is a substantial departure from previous predation control programs that applied to larger geographical areas. As such, it is an experimental approach. If successful, this approach may lead to developing methods that can be used to better focus future predation management activities and increase the capacity for local, more self-reliant programs. For this approach to be effective, there must be adequate means available for local residents and others to effectively regulate predator numbers following Department conducted control programs.
- E. The Board recommends continued use of the adaptive management process as the Unit 19D East predation control program proceeds, and as research and management results provide additional information. The Board will work with the Department to consider changes in the program as future need arises.
- F. The Board recommends the Department proactively provide public information on predator/prey dynamics and the effort to rebuild the moose population in the McGrath area on a statewide and national basis. The Department should also make the effort to reach out to rural Alaska residents through mail and other techniques, to supplement the current web site information.
- G. In consideration of the amount of time, effort, and public process expended by the Department and Board of Game over the last decade, it is essential that the predation control project move forward now. If the project does not receive approval to move forward within two years, it should be discontinued completely to avoid unnecessary expenditure of public funds and raising false expectations among the public.
- H. Difficult decisions must be made before initiating something as controversial as predator control. Once decisions are made to implement a predator control program, then it is no longer an issue of fair chase. The management program is not hunting in the conventional sense, so it must be designed to minimize opportunity for predators to escape. The Department must apply the following criteria in making decisions about how a predation control program should be implemented:

Criteria:

1. Effective: The program must be able to achieve management objectives. Any techniques used must have a high probability of success or the Department should not proceed.
2. Efficient: The program must be implemented and completed within a preset period of time with the wisest use of resources possible considering weather conditions and calving activities.
3. Affordable: The program must be conducted within the resources available, including personnel, training, experience, and money.
4. Safe: The program must be safe for staff and others involved in implementation. Field operations to meet program objectives must not present undue risks to the lives or well being of program personnel.

5. Humane: Predation control should be conducted as humanely as possible.
 6. Advancement of Knowledge: The program should further research knowledge and improve management capabilities.
 7. Appropriate for Current Environmental Conditions: The techniques applied must be appropriate for snow conditions and other factors that exist at the time the program will be implemented.
- I. After reviewing the history, research management actions taken, previous and current Board findings, and predator control criteria laid out above, the Board of Game recommends the Department implement a Unit 19D East experimental management program according to the guidelines described below.

Guidelines for Unit 19D East Experimental Predator Management Program

1. Prioritized Methods of Removing Predators
 - a. Department staff should maintain the integrity and achieve the objectives of the program, including removing wolves and bears that use the 520 mi² Experimental Micro Management Area (EMMA). Predator removal techniques should most closely meet the criteria for predator control (page 4), including using helicopters, airplanes, or other mechanized vehicles.
 - b. The project should continue for up to 4 years but could be terminated before 2007 if project objectives for the EMMA are met or if the program is ineffective.
 - c. All predation control efforts should be conducted with the cooperation and involvement of local residents as long as project criteria are met. This includes capture and removal of bears and wolves.
 - d. The Department and local governments would continue to encourage and train local trappers to take more wolves and hunters to take more bears and wolves within the EMMA in Unit 19D East. The Department will assist trappers in locating the best trapping sites.

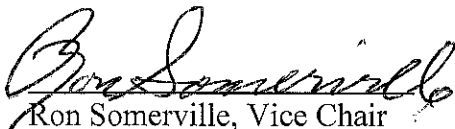
2. Wolves:
 - a. Wolves should be removed from the EMMA by Department staff with as much public involvement as possible using the following techniques in order of priority:
 - Shooting from helicopters (most clearly meets the predator control program criteria on page 4); or
 - Darting from helicopters and euthanizing; or
 - Darting from helicopters and relocating.
 - b. If it is not possible to shoot wolves with the use of helicopters in 2003, the Department should immobilize and euthanize or relocate them as long as program criteria (page 4) are met and it is made clear that this is not a mandatory precedent for subsequent years or comparable programs.
 - c. Up to 40 wolves may be removed during the first year of the program. Wolves that attempt to repopulate the area will be removed in subsequent years.
 - d. The Department should remove wolves from the EMMA during October-November of each year during the life of the project. The Department should rely on local trappers to prevent or minimize the number of wolves repopulating the EMMA during mid-winter. If significant numbers of wolves remain in the EMMA by March 15, the department should remove the wolves in late March or April.

3. Bears:
 - a. Whether or not wolf control is initiated in 2003, bears in the EMMA should be captured and relocated during May-July 2003, and in additional years if bear removal proves consistent with the criteria (page 4).

- b. During May-July, adult male and female black bears and grizzly bears will be captured and relocated to remote state lands at least 150 miles from the EMMA. Bears will be:
 - Dated from a helicopter, and/or
 - Foot snared from the ground.
 - c. About 30 black bears and up to 5 grizzly bears should be moved.
 - d. Black bear sows with cubs should not be moved.
 - e. Up to 30 relocated bears should be radiocollared to determine if and how quickly they return.
4. Moose Harvest Management
- a. The EMMA will be closed to moose hunting during the years in which intensive removal of wolves or bears is underway.
 - b. The EMMA will be reopened to moose hunting when intensive removal of predators ceases.
5. Research Program
- a. Expand browse surveys in March and April, 2003.
 - b. Assess calf mortality in 2003 and perhaps 2004, depending on the results of the management experiment in 2003.
 - c. Weigh 10-month-old female moose and conduct natality and twinning surveys.
 - d. Conduct a moose population estimate and composition survey in the EMMA in fall 2003.
 - e. Research design after 2003 will depend upon the results of the management experiment.
6. Post Predator Control Activities
- a. The Department should work with hunters, trappers and the Board to promote and develop adequate means to regulate wolf and bear populations in the McGrath area as a means of sustaining moose harvests over the long term.
 - b. The Department should work with land managers to improve moose habitat within the EMMA.

Vote: 6-0

Adopted this 12th day of March, 2003
Anchorage, Alaska


Ron Somerville, Vice 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

ALASKA BOARD OF GAME FINDINGS

Intensive Management for Unit 19D(east)

96-101-BOG

1. The Board of Game considered the status of moose, wolf and bear populations in Unit 19D(east) at its March, 1995, meeting. At that time, the Board found that the moose population was depleted and its productivity reduced. The Board found that intensive management was appropriate for this area and directed the department to prepare an implementation plan to reduce wolf numbers for consideration by the Board at its October, 1995, meeting. The remainder of the Alaska Board of Game Findings, Intensive Management for Unit 19D(east), 95-86-BOG are reaffirmed, and incorporated by reference.
2. At its October, 1995, meeting the Board of Game considered testimony from the public and the department on the implementation plan proposed by the department. Based on that testimony, and in consideration of the requirements of AS 16.05.255 and 5 AAC 92.110, the Board authorized the Commissioner to reduce the wolf population in Unit 19D(east) to not less than 50 wolves, using whatever methods he deemed appropriate, safe, humane and efficient. In recognition of the Governor's decision to suspend wolf control until a study of the management of predators and prey in Alaska is completed by the National Academy of Sciences, the Board set the effective date for this authorization at July 1, 1997.
3. At its March, 1996, meeting the Board of Game receive a petition from the Tanana Chiefs' Conference on behalf of the people of the upper Kuskokwim requesting the Board amend the regulations authorizing wolf control in Unit 19D(east) to allow control efforts to begin October 1, 1996. The petition cited continuing hardship on the residents on Unit 19D(east) as a result of low and declining moose populations.
4. Testimony by the department regarding the results of a February, 1996, moose census confirmed the moose population density in Unit 19D(east) was low, averaging 0.4 moose/mi², and that the moose:wolf ratio was 12:1.
5. The Board found that the situation in Unit 19D(east) warranted consideration. The Commissioner informed the Board that the Governor's prior decision to suspend action pending completion of the NAS study would not necessarily prevent the department from taking action at an earlier date if authorized by the Board.
6. In consideration of the foregoing, the Board found it appropriate to revise the effective date for the Unit 19D(east) wolf control program to July 1, 1996.

DATE: April 18, 1996
Juneau, Alaska


Larry Holmes, Chair

VOTE: 6 Favor 0 Oppose 1 Absent

FINDINGS OF THE BOARD OF GAME

96-97-BOG

Fortymile Caribou Management Plan Implementation

1. The planning process used by the Fortymile Caribou Planning Team (Team) involved a wide range of public and agency interests in formulating comprehensive management recommendations for the Fortymile Caribou Herd and its ecosystem.
2. At its meeting in Anchorage, Alaska October 21 - 27, 1995, the Board of Game considered public testimony on the final Fortymile Caribou Herd Management Plan (Plan) prepared by Team. Based on public and agency testimony, and in consideration of the Board's statutory authorities and requirements, the Board unanimously endorsed the Plan.
3. The Board of Game recognizes the recommendations in the Plan as a comprehensive compromise package. Parties on the Team acknowledged and honored the values of other Team members in reaching agreement. To maintain the integrity of the compromise embodied in the Plan, all essential elements of the plan must be fully implemented in a timely manner.
4. The recommendations in the Plan include aspects that are both within and outside the jurisdiction of the Board. Recommendations within the jurisdiction of the Board include reduction in total harvest of Fortymile Caribou to a maximum of 150 bulls each year for five years and implementation of non-lethal wolf control.
5. In 1992, the Board of Game found the amount of Fortymile caribou reasonably necessary to provide for subsistence use was 350 - 400 caribou. However, the amount reasonably necessary can vary both with time and circumstances. The Board has heard testimony from major user groups of the Fortymile caribou herd, including the Delta, Eagle, Fairbanks, and Upper Tanana/Fortymile Fish and Game Advisory Committees; the Eastern Interior Federal Regional Subsistence Advisory Council; the Village Councils of Dot Lake and Tanacross; Tanana Chiefs Conference and Dawson First Nations. All parties agree that 150 bull caribou is the amount of caribou reasonably necessary to provide for subsistence use at this time, in the context of the Fortymile Caribou Management Plan. The reasons for this are:
 - subsistence hunters believe it is in their own best, long-term interest to voluntarily forego any higher harvest of Fortymile Caribou to ensure implementation of the entire Plan agreement and to speed recovery of the herd;
 - alternative caribou are currently available in increasing numbers to all subsistence users, although they are less accessible to residents of Eagle;

The Board recognizes that this is a unique circumstance arising from the Fortymile planning process. The finding that 150 bull caribou is the amount reasonably necessary is inextricably linked to implementation of the Fortymile Caribou Plan. If, for any reason, implementation of the plan stops, the number of caribou reasonably necessary to provide for subsistence will revert to the prior level of 350 - 400. At the end of the plan period, the amount reasonably necessary to provide for subsistence use will need to be re-evaluated under the circumstances prevailing at that time.

6. The existing codified regulations governing taking of Fortymile Caribou, 5 AAC 85.025(15), provide a framework within which the Department can administer hunting in a manner fully consistent with the harvest recommendations in the Plan through exercise of discretionary authority vested in the department under 5 AAC 92.052. Therefore, no change in the codified regulations is necessary to implement the recommendations of the Plan with respect to harvest.

7. Maintaining the existing codified regulations for taking Fortymile Caribou in 5 AAC 92.025(15) will allow the department flexibility to immediately restore opportunity for taking caribou if, for any reason, the department cannot or does not implement other essential elements of the Plan's recommendations designed to reduce the effects of wolf predation.


Accordingly, the Board of Game directs the Division of Wildlife Conservation to:

1. Manage hunting of the Fortymile Caribou Herd to achieve a maximum harvest of 150 bull caribou during the 1996-97 regulatory year, and subsequent years through 2000-01 as long as the Plan remains in effect. Timing of open hunting periods shall maximize the length of the fall season while maintaining the opportunity for taking at least 50 bull caribou during a winter season. The department shall use discretionary authority under 5 AAC 92.052, including but not limited to, restricting use of motorized vehicles as necessary, to regulate harvest.

2. Prepare an implementation plan for non-lethal wolf control consistent with the recommendations of the Plan and consistent with 5 AAC 92.110, for consideration by the Board of Game no later than the Spring 1997 meeting.

To uphold the compromise, it is the policy of the Board of Game that if, for any reason, the department fails to prepare an implementation plan, or the commissioner decides not to implement non-lethal control authorized by the Board by winter 1997-98, the Board shall consider the Plan to be void. In such event, the division shall immediately restore hunting opportunity to the level existing prior to the 1996-97 regulatory year.

Adopted March 28, 1996, at Fairbanks, Alaska
Vote: 7-0


Larry Holmes, Chair
Alaska Board of Game

ALASKA BOARD OF GAME FINDINGS

Intensive Management for Unit 19D

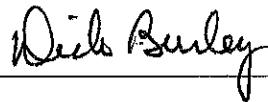
95-86-BOG

1. Given the long hunting history and importance moose to the economic and social well-being of residents of Game Management Unit 19D, the Board finds that human consumptive use is the preferred use of moose in Unit 19D.
2. Based upon information provided by the Department and public testimony regarding habitat condition and potential, population characteristics and trends, sustained yield principles and various ecological relationships, the Board has determined the moose population should be at least 6,300 animals with an annual sustainable human harvest of 340. The current moose population is estimated at 2,100. Last fall's harvest was about 83-90 and next fall's harvest is expected to be about 83-90.
3. The moose population is depleted and its productivity is low. As a result, there has been a significant reduction in the allowable moose harvest.
4. According to information provided the Board, the moose population has been depleted and its productivity reduced primarily by deep snow and wolf predation. Of these two factors, only wolf predation is manageable.
5. The habitat can support a moose population at least three times the size of the current population. The Board believes it is feasible to enhance the moose population through recognized and prudent management techniques.
6. According to information provided the Board, a moose population subject to a wolf:moose ratio of 1:50 can be expected to increase under favorable weather conditions. The wolf:moose ratio in Unit 19D (east) is currently is 1:12. At this

ratio the moose population can be expected to decline regardless of weather effects. The Board finds wolf numbers should be reduced until a ratio of 1:50 is observed.

7. Therefore, in order to increase calf survival, improve productivity and increase the moose population, the Board finds it appropriate to request a draft wolf control implementation plan be developed by the Department and presented to the Board at the October 1995 meeting to allow the Board to consider options to reduce the number of wolves in the area.

DATE: March 31, 1995



Dick Burley, Chair

VOTE: 6 Favor 0 Oppose 1 Absent

ALASKA BOARD OF GAME FINDINGS

Intensive Management for Unit 20D

95-85-BOG

1. Given the long history and importance of hunting in Game Management Unit 20D, the Board finds that human consumption of moose and caribou is the preferred use of those species in Unit 20D.

2. Based upon information provided by the Department and public testimony regarding habitat condition and potential, population characteristics and trends, sustained yield principles and various ecological relationships, the Board has determined the moose population should be between 8,000 and 10,000 animals with an annual human harvest of 240 to 400. The current moose population is estimated at 2,800-4,800. Harvest during the past 5 years has averaged about 130 moose.

3. Based on information described above, the Board has determined the caribou population should be between 600 and 800 animals with an annual human harvest of 30 to 50. The population currently is estimated at 500. The season has been closed since 1992.

4. According to information provided the Board, the moose population has been depleted and its productivity reduced. The moose population and harvestable surplus are currently limited by wolf and bear predation and there has been a significant reduction in allowable moose harvest. Habitat in the Unit can support a density of at least 1.7 moose per square mile.

5. According to information provided the Board, the caribou population has been depleted and its productivity reduced through adverse weather, bear predation on calves and wolf predation. The caribou population and harvestable surplus

are limited by predation. Hunting of caribou has been prohibited since 1992.

6. The Board believes it is feasible to enhance the moose and caribou populations through recognized and prudent management techniques.

7. There is considerable research indicating brown bears are significant predators of moose and caribou calves, and the Board concludes the brown bear population should be reduced until there is a consistent and significant increase in moose and caribou calf survival.

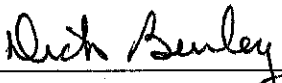
8. Therefore, in order to increase calf survival, improve productivity and increase the moose population, the Board finds it appropriate to adopt regulations allowing hunters to take one brown bear per regulatory year and waive the \$25 tag fee for brown bear hunters in southeastern or northern Unit 20D. The Board believes that the combination of more liberal bag limit and no tag fee will result in a higher take of brown bear and reduced predation.

9. The wolf population in Unit 20D is currently approximately 80. There is considerable research indicating wolves are significant predators of caribou and moose. In light of the depletion of the caribou and moose populations, the Board believes it appropriate to set the wolf population objective at 15-125 wolves. This broad range is necessary to allow temporary reduction of the wolf population to low levels to stimulate prey population increases, followed by recovery of the wolf population to higher levels.

10. Department biologists estimate there will be 100-110 wolves this spring after pups are born. The Board concludes the wolf population should be reduced until moose and caribou populations and harvest reach established goals. The Board believes that a longer trapping season will contribute to a higher take of wolves and reduce predation.

11. The board finds it appropriate to request a draft wolf control implementation plan be developed by the Department and presented to the Board at the October 1995 meeting to allow the board to consider further options to reduce the number of wolves in the area.

DATE: March 31, 1995



Dick Burley, Chair

VOTE: 6 Favor 0 Oppose 1 Absent

ALASKA BOARD OF GAME FINDINGS

Intensive Management for Unit 13

95-84-BOG

1. Given the long hunting history and importance of Game Management Unit 13, the Board finds that human consumption of moose and caribou is the preferred use of those species in Unit 13.

2. Based upon information provided by the Department and public testimony regarding habitat condition and potential, population characteristics and trends, sustained yield principles and various ecological relationships, the Board has determined the moose population should be between 20,000 and 25,000 animals with an annual human harvest of 1,200 to 2,000. The current moose population is estimated at 18,000, down from a peak of 27,000 as recently as 1987. Last fall's harvest was about 850 and next fall's harvest is expected to be about 650.

3. Based on information described above, the Board has determined the caribou population should be between 35,000 and 40,000 animals with an annual human harvest of 3,000 to 6,000. The population currently is estimated at 44,000. Last season's harvest appears to have been 3,500-4,000.

4. While caribou currently meet population and human harvest objectives, the moose population is depleted and its productivity is low. As a result, there has been a significant reduction in the allowable moose harvest.

5. According to information provided the Board, the moose population has been depleted and its productivity reduced through deep snow winters, bear predation on calves and wolf predation. The moose population is approaching, but not yet at what biologists term a "predator pit" which means if present trends continue,

the primary factor limiting the growth and size will be predation.

6. The Board believes it is feasible to enhance the moose population through recognized and prudent management techniques.

7. There is considerable research indicating brown bears are significant predators of moose calves, and the Board concludes the brown bear population should be reduced until there is a consistent and statistically significant increase in moose calf survival. However, the brown bear population must not be reduced below 350 animals in order to maintain a viable brown bear population.

8. According to information provided the Board, in the mid 1980s when the moose population was increasing the ratio of calves to cows was 25-30:100 and the ratio of yearling bulls was 8-10:100. The Board finds brown bear numbers should be reduced until the calf:cow ratio is 30:100 and the yearling bull:cow ratio is 10:100 on a consistent basis. Currently, those ratios are 17:100 and 4:100, respectively.

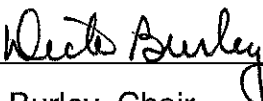
9. Therefore, in order to increase calf survival, improve productivity and increase the moose population, the Board finds it appropriate to adopt regulations allowing hunters to take one brown bear per regulatory year in a season extended to coincide with the opening date of sheep and caribou seasons and to partially overlap the moose season. At its January meeting, the Board waived the \$25 tag fee for brown bear hunters in Unit 13. The Board believes that the combination of a longer season, more liberal bag limit and no tag fee will significantly reduce the brown bear population.

10. There is considerable research indicating wolves are significant predators of moose. The current wolf population objective of 175-225 was set in the late 1980s when the moose population was much higher. In light of the depletion of

the moose population, the Board believes it appropriate to reduce the wolf population objective to 135-165.

11. Department biologists estimate there will be 200 wolves this spring after hunting and trapping end but before pups are born. The Department also provided information indicating hunters and trappers are becoming increasingly effective in harvesting wolves. Given that trend, and given that it appears that the spring wolf population won't be all that much higher than the upper limit of the new population objective, the Board has requested the Department to study whether wolf numbers will be sufficiently reduced through existing seasons, bag limits, methods and means, and to report its conclusions at the Board's fall meeting.

DATE: March 31, 1995



Dick Burley, Chair

VOTE: 5 Favor 0 Oppose 1 Abstain 1 Absent

FINDINGS OF THE BOARD OF GAME REGARDING CHANGES TO 5 AAC 92.125

The Board of Game met on November 9, 1994 to consider revisions to the regulations governing the wolf predation control program in Game Management Unit (GMU) 20A. Based on information presented to the Board by the Department the Board makes the following findings:

1. The original boundary of the wolf control area was established to provide protection to the Headquarters and Savage Wolf packs from state-conducted control activities. These packs' territories were excluded to avoid impact on Denali National Park.
2. During the first year of implementation of 5 AAC 92.125 the Department determined that a large pack of wolves, now referred to as the Lower Yanert pack, ranges in the lower Yanert River, Moody and Dick Creek drainages. This pack's territory is distinct from those of the Headquarters and Savage packs and is bisected by the original control area boundary. Recent information indicates that this pack is a major source of predation on Delta caribou calving within the Yanert valley. Removal of this pack is important to accomplishing the objectives of 5 AAC 92.125.
3. Department monitoring indicates that the Lower Yanert pack spends significant portions of time outside the original control area. Unless the control area boundary is adjusted, predation by this pack cannot be adequately controlled.
4. Information obtained over the past year by both the Department of Fish and Game and the National Park Service (NPS) on wolf pack movements in southwestern GMU 20A demonstrate that the boundary can be adjusted without jeopardy to the Headquarters and Savage wolf packs. Biologists with the NPS reviewed the proposed boundary adjustment and had no objection. The Department and NPS will continue to communicate and coordinate to ensure that the Savage and Headquarters packs are not adversely affected by state control activities.
5. Time is of the essence. Weather conditions, day length and the many variables that affect trapping success demand immediate action. Expedited adoption of a boundary change is necessary to provide adequate opportunity to control predation by the Lower Yanert pack.
- 6 Results of the first year's efforts to control predation in GMU 20A indicate that the overall population level of 100 wolves specified in 5 AAC 92.125 is too high to permit


effective control of predation. Prior experience in GMU 20A demonstrates that the viability of the wolf population would not be threatened by adoption of a lower population size.

7. Accordingly, 5 AAC 92.125 is modified as follows:

5 AAC 92.125 WOLF PREDATION CONTROL IMPLEMENTATION PLAN. (a) A Unit 20(A) wolf predation control area is established and consists of Unit 20(A) except for: the Fort Wainwright and Fort Greely Military Reservations, Clear Air Force Station; and that portion of Unit 20(A) south and west of a line beginning at the confluence of Lignite Creek and the Nenana River, then along the north bank of Lignite Creek to the mouth of Sanderson Creek, then in a direct line to the top of Dora Peak, then in a direct line to the top of Mount Fellows, then in a direct line to the top of Pyramid Mountain, then in a direct line south to the southern boundary of Unit 20(A)....

5 AAC 92.125(a)(2)...

(A) for up to 3 years beginning October 1, 1993, the commissioner may reduce the wolf population in Unit 20(A); however, the commissioner may not reduce the late winter wolf population within [THE UNIT 20(A) WOLF PREDATION CONTROL AREA TO FEWER THAN 35 WOLVES OR WITHIN] all of Unit 20(A) to fewer than [100] 75 wolves;


Richard Burley, Chairman
Alaska Board of Game
Fairbanks, Alaska

9 November 94
Date

VOTE: 7-0