FINAL

ANALYSIS and RECOMMENDATIONS for

BOARD OF GAME PROPOSALS

February 2013 - Region IV

Alaska Department of Fish & Game

Division of Wildlife Conservation and Division of Subsistence

January 18, 2013

The department's recommendations are based on analysis of the proposals with available information. These recommendations may change after further analysis based on public comment or additional information.

PROPOSAL 45

EFFECT OF THE PROPOSAL: Change hunting regulations for the Mulchatna Caribou Herd (MCH) in subunits 9A&B; subunit 9C, that portion within the Alagnak River drainage; Units 17 and 18; and subunits 19A&B. Under this proposal, hunting for Mulchatna caribou would change from the general hunt to a registration hunt. Seasons and bag limits would be aligned within the range of the Mulchatna Herd.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department Proposal. This proposal changes the Mulchatna Caribou Herd (MCH) hunt structure from a general caribou hunt using a harvest ticket to a registration permit hunt in Units 17 and 18 and subunits 9 A,B,&C and 19A&B. The Board has also accepted an Agenda Change Request to include Game Management Units within the range of the MCH that was not on the call for proposals (Unit 18 and subunits 19A&B).

The MCH is presently under Intensive Management (IM) regulations, with predator control activities ongoing in the major calving areas. The IM program is necessary to ensure that there is reasonable opportunity for subsistence and eventually achieve IM harvest objectives. However, harvest reporting in some areas where Mulchatna caribou are taken remains problematic making it difficult to demonstrate that current harvests are sustainable and difficult to evaluate the efficacy of the IM program.

During regulatory year (RY) 2010 (RY10 = July 1, 2010 through June 30, 2011) 2,043 general caribou harvest tickets were issued to hunters residing within the range of the MCH. However, only 961 (47%) of those caribou harvest report cards were returned. Only 485 hunters reported hunting caribou, and they killed a total of 280 caribou. Statewide, caribou hunters obtaining the general harvest tickets (for general caribou hunts throughout the state) during RY10 had a slightly better reporting rate, with 11,425 harvest tickets issued, 8,031 (70%) harvest cards returned, and 3,057 hunters killing 1,392 caribou. For all registration caribou hunts throughout the state in RY10, 6,941 registration permits were issued, 6,287 (91%) permit harvest cards were returned, with 3,978 hunters killing 1,268 caribou. Data from previous years show the same wide disparity between rates of returns for general harvest report cards and registration report cards. More and better information necessary for managing caribou is obtained from the registration hunt system.

In recent years, most of the reported (and likely unreported) hunting activity for Mulchatna caribou has been in Unit 18. Of concern is that with the large number of small villages in the vicinity of the Kuskokwim River, local hunters would be unfamiliar with the registration permit hunt system. However, in that same area there have been registration permit moose hunts since 2008. During RY10 there were 1,527 registration moose hunt permits issued for RM615 (Unit 18, one antlered bull, September 1–10), with 1,459 permit hunt reports returned (96% return rate). There are similar registration moose hunts in Units 9 and 17 and subunit 19C, with the fall registration subunits 17B&C moose hunt (RM583) having been in effect since 1983. So, in much of the MCH range, many local hunters are familiar with the registration permit hunts and

reporting system. However, it will take increased effort from the Department and agencies cooperating in Mulchatna caribou management to inform the public of the registration hunt system.

Another concern would be the availability of the registration permits. It is not the intent of this proposal for this registration permit hunt to restrict hunter numbers, but to get better hunting and harvest information. Permits would be available before and throughout the hunting season. Permits will be available on online and at ADFG office throughout the state. In addition, the Department intends to investigate additional opportunities to enable hunters to easily obtain the registration permits to hunt Mulchatna caribou.

Another issue problematic to the present use of the general caribou harvest card for hunting Mulchatna caribou is the number of harvest tickets issued with the general harvest card. The statewide general harvest card contains 5 harvest tickets, but the present bag limit for Mulchatna caribou is only 2 caribou. The potential for confusion about the correct bag limit is great. The potential for misuse of the harvest tickets, to take more than the legal bag limit, is also great. A registration permit with only two harvest tickets would address both that issue.

Season and bag limit changes in this proposal are to align bag limits and season ending dates across the range of the MCH. The bag limit would be changed from 1 caribou to 2 caribou in a portion of subunits 17A and 17C which is only opened by announcement. The bag limit and season ending date for RC504 (a "may be announced season in subunit 9C) would be changed to be consistent with the rest of the herd's range. The hunting season dates and bag limit for this registration permit hunt were not addressed during previous Board meetings which aligned hunting seasons and bag limits throughout the herd's range.

Changing to a registration hunt throughout the herd's range would allow the department to better assess hunter harvest as well as the results of the Intensive Management program. In addition, the improved reporting will provide more information when responding to in-season requests to alter season dates and bag limits. The board and department have received regular requests from the public to extend the hunting season and requests from federal agencies to shorten or close the season. Improved reporting will allow the Department to better address these concerns and ensure harvest opportunity is not lost.

PROPOSAL 46

EFFECT OF THE PROPOSAL: Close the caribou season in Unit 17 during the month of October and extend the season from March 15 to March 31. Bag limit would remain the same.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The first part of this proposal is to close caribou hunting in Unit 17 during the rut in October. Reported caribou harvest during October (see Table) has been low for the past several years. Because most of the October caribou harvest is taken by local residents, the concern about trophy hunting expressed in the proposal is likely negligible. The Department does not object to a range-wide closure during October, though it seems to be an unnecessary restriction of opportunity.

Table. Summary of caribou harvests that occurred within the range of the Mulchatna caribou herd during the month of October, regulatory years 2000 through 2011.

	Reported	Number of	Number of Caribou Harvested by				est
	Harvest	H	Hunters Living:				
Regulatory	in	Within	Outside	Unknown			
Year	October ^a	MCH Range	MCH Range ^b	Residency	Male	Female	Unk
2000	237	19	218	0	195	42	0
2001	120	16	102	2	99	21	0
2002	122	13	104	5	93	29	0
2003	126	12	114	0	97	29	0
2004	59	12	47	0	40	18	1
2005	45	19	26	0	28	17	0
2006	10	6	4	0	7	3	0
2007	12	9	3	0	10	2	0
2008	12	10	2	0	9	3	0
2009 ^c	24	19	5	0	22	2	0
2010	6	6	0	0	3	3	0
2011	8	4	4	0	4	4	0

^a Includes caribou reported killed from entire herd range, not just Unit 17

The Board has considered other proposals to extend this hunting season into the spring and has not adopted them. The current season was established in 2007when the Board restricted caribou hunting by establishing a March 15 closing date and adopted uniform regulations throughout the range of the Mulchatna Caribou Herd (Units 9, 17, 18 and 19). The Board considered reasonable opportunity for subsistence uses by resident hunters and addressed the ANS (amount reasonably necessary for subsistence uses) for the MCH.

Radio-tracking data indicates there is little difference in the availability of caribou to Nushagak River villages in early March versus late March. Traveling conditions typically degrade later in the spring, so access most years during the first two weeks of March is generally adequate.

The Department has a biological concern if a portion of the Mulchatna herd's range is opened for caribou hunting in late March because it could result in a considerable amount of hunting pressure, particularly in the eastern segment of the herd where calf ratios and bull ratios remain low (17 bulls:100 cow and 22 calves:100 cow during October, 2012). The harvestable surplus for the Mulchatna herd is fully allocated and no additional opportunity should be adopted in Unit 17 without concurrently adopting regulations to reduce harvests in this portion of the herd's range.

^b Includes nonresidents

^c Beginning in 2009, no nonresident season

A predator control program to increase the herd's harvest potential has been implemented recently. The Department does not recommend liberalizing caribou harvest opportunities until there is additional increase in the sustainable harvest.

The Department believes that the existing season (August 1 – March 15) provides reasonable opportunity for residents interested in harvesting a caribou. Adoption of this proposal would create different hunting regulations for different portions of the herd's range.

Under 5 AAC 99.025 (a) (4), the board has found that the Mulchatna herd has positive customary and traditional uses, and has set the amount reasonably necessary for subsistence as 2,100–2,400 caribou in units 9A, 9B, 17, that portion of 19A south of the Kuskokwim River, and 19B.

PROPOSAL 47

EFFECT OF THE PROPOSAL: Open a nonresident hunting season for caribou in subunit 17B, and require nonresidents to hunt with a registered guide. Increase the nonresident caribou locking tag fee in subunit 17B to \$1000 per tag and limit the number of locking tags available to two tags for each registered guide who is licensed in a Guide Use Area.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: Most of what this proposal requests cannot be authorized by the Board of Game. The Board does not have the authority to establish caribou as a species requiring a nonresident hunter be accompanied by a registered guide or set game tag fees; that would require action by the Alaska Legislature. It is uncertain what authority the Board might have to limit availability of caribou tags to only registered guides, and whether the intent is to make two tags available to all guides licensed in a Guide Use Area (GUA), or only those guides licensed in a GUA within subunit 17B.

The Department is currently investigating reported and unreported harvest of caribou in the western portion of the Mulchatna herd's range to verify that the harvestable surplus for the Mulchatna herd is fully allocated and implementing a predator control plan in a portion of the herd's range to increase harvest potential. Regulation changes to liberalize harvest opportunities should be held off until we have better information indicating an increase in the number of caribou available for harvest. Caribou harvest potential is most limited in the eastern portion of the herd's range, which includes subunit 17B, where the bull ratio and calf ratio remain low (17 bulls:100 cow and 22 calves:100 cow during October, 2012). If the Board chooses to allocate caribou hunting opportunity to nonresident hunters in subunit 17B by adopting this proposal, the Department recommends restricting resident harvest opportunities (keeping in mind the subsistence law at AS 16.05.258) in the eastern portion of the herd's range to compensate for the additional caribou harvest taken by nonresidents.

Under 5 AAC 99.025 (a) (4), the board has found that the Mulchatna herd has positive customary and traditional uses, and has set the amount reasonably necessary for subsistence as 2,100–2,400 caribou in units 9A, 9B, 17, that portion of 19A south of the Kuskokwim River, and 19B.

PROPOSAL 48

EFFECT OF THE PROPOSAL: Establish a nonresident registration hunt for moose in the Togiak National Wildlife Refuge in subunit 17A.

DEPARTMENT RECOMMENDATION:

No Recommendation – Allocation of hunting opportunity

Amend and Adopt – Management plan guidelines, liberalized bag limit,

and winter season extension

RATIONALE: The Department does not have a recommendation on the allocation of moose hunting opportunity proposed, however the Department does recommend adopting regulatory changes that would enable the implementation of the Unit 17A Moose Management Plan, which was modified during a meeting of the Unit 17A Moose Management Planning Group in December 2012. The planning group includes representatives from the Bristol Bay Federal Subsistence Regional Advisory Council, the Nushagak and Togiak Fish and Game Advisory Committees, the Togiak National Wildlife Refuge, and the Alaska Department of Fish and Game GMU 17 management office.

Based on the third goal of the revised plan (see moose management goals and objectives below), the department recommends amending the proposal by increasing the winter bag limit for residents to "up to 2 moose" and extending the winter season to "up to 31 days". The third goal also provides guidance on offering nonresident hunting opportunity when the population exceeds 1,000 moose.

The moose population in subunit 17A is growing (see Figure) and can sustain additional harvest; however, the objectives for this population include allowing it to expand into neighboring areas as well as provide for additional harvest opportunity. The population is currently contributing to the growth of moose populations, especially to the north and west.

Under 5 AAC 99.025 (a) (8), the board has found that there are positive customary and traditional uses of moose in all of GMU 17 and has found that 100–150 moose are reasonably necessary for subsistence in the unit.

Unit 17A Moose Management Plan: Moose management goals and objectives

Management goals of this plan explain what is planned for the management of moose in Unit 17A. Management objectives describe how the goals can be carried out.

Goal 1: Ensure a self-sustaining moose population in Unit 17A.

Management Objectives for Goal 1

1. Maintain the Unit 17A moose population at 800 to 1,200 moose. This population range may be adjusted based on moose reproductive and physical parameters.

- 2. Monitor moose population parameters through aerial radio-tracking surveys, and a population estimate conducted every two years or as needed.
- 3. Maintain a minimum of 20 radio-collared moose to monitor calf production, survival and recruitment, movements and adult mortality.
- 4. Maintain a close working relationship among Plan participants in managing this moose population.
- 5. Consider and implement other research as necessary.

Goal 2: Maintain and protect moose habitat and other necessary components of the ecosystem in Unit 17A upon which the moose population depends.

Management Objectives for Goal 2

- 1. Continue to describe, quantify, and map existing vegetation cover types.
- 2. Ensure the Unit 17A moose population does not exceed carrying capacity.
- 3. Determine nutritional qualities of moose browse.
- 4. Work with village corporations and private landowners to minimize the impacts to moose habitat in Unit 17A.

Goal 3: Provide for a regulated harvest in a manner consistent with Federal and State laws, and the goals and objectives of this management plan.

Management Objectives for Goal 3

- 1. When the population is less than 300 moose, no harvest will occur.
- 2. When the population trend is stable or increasing above 300 moose, allow a fall and winter harvest of bulls, by State registration permit available in Togiak and Dillingham. If the population trend is declining and is between 300 600 moose, harvest may be reduced or suspended.
- 3. When the population trend is stable or increasing and above 600 moose, allow a limited winter hunt for antlerless moose. When the population trend is declining and is between 600 and 900 moose, the antlerless harvest may be suspended.
- 4. Aircraft access will be restricted for the fall hunt for two miles either side of the Togiak River, Togiak Lake, Izavieknik River, Upper Togiak Lake (Second Lake), Ongivinuck River and along the lower five miles of both the Kemuk (also known as Narogurum) and Nayorurun (also known as Nagugun or Kashaiak) Rivers (Figure 1).

- 5. When the population trend is stable or increasing and exceeds 1,000 moose, allow a limited fall nonresident hunt by State permit. When the population exceeds 1,000 but shows a declining trend, nonresident hunting will be suspended. Permits will be phased in with up to 5 permits issued in the first year and up to 10 permits issued in the second year of non-resident hunting. After the second year, up to 5 permits will be available when the population is between 1,000 and 1,100, up to 10 permits will be available when the population is between 1,100 and 1,200 and up to 20 permits when the population exceeds 1,200.
- 6. When the population exceeds 1,200 moose, allow a bag limit of up to 2 moose.
- 7. Hunting regulation proposals and recommendations, consistent with this management plan, will be developed cooperatively with Plan participants and submitted to the Federal Subsistence Board and Alaska Board of Game.

Goal 4: Encourage cooperative management and communication between Plan participants in developing and carrying out management, research and enforcement programs, and with the public by exchanging ideas and knowledge about Unit 17A moose.

Management Objectives for Goal 4

- 1. Plan participants will meet as needed to update the plan and discuss issues involving moose in Unit 17A.
- 2. Plan participants will cooperate in formulating and reviewing management and research programs including but not limited to an aerial census, aerial surveys, radio telemetry monitoring, composition counts, recruitment surveys and harvest reporting.
- 3. Plan participants will coordinate to the extent possible enforcement activities that are to be conducted within Unit 17A or adjacent areas.
- 4. Plan participants will provide information to local residents and conduct public programs concerning the importance of managing the moose population. In addition both agencies plan to provide information and educational materials concerning moose ecology, subsistence use and stress the significance of the cooperative moose management plan. Plan participants will work closely with area residents to ensure there are opportunities to discuss management activities and concerns people may have.

Under 5 AAC 99.025 (a) (8), the board has found that there are positive customary and traditional uses of moose in all of GMU 17, and has found that 100–150 moose are reasonably necessary for subsistence in the unit.

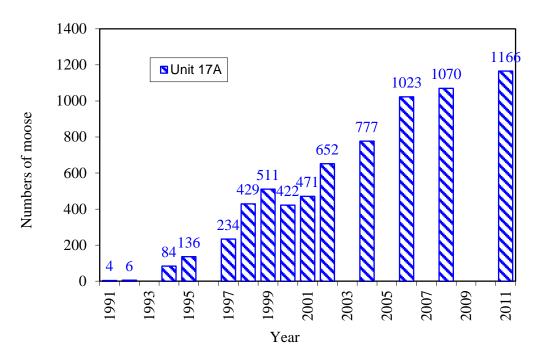


Figure. Number of moose observed during winter aerial surveys in subunit 17A, southwest Alaska, 1991 – 2011. Missing bars indicate no survey conducted that year.

Amended language would read:

5 AAC 85.045. Hunting seasons and bag limits for moose (a) ...

	Resident Open Season	
TI ' ID T' '	(Subsistence and	Nonresident
Units and Bag Limits	General Hunts)	Open Season
(15)		

Unit 17(A)

<u>Up to 2 moose</u> [1 BULL] per regulatory year as follows:

RESIDENT HUNTERS:

1 bull by registration Aug. 25-Sept. 20 permit only; or (Subsistence hunt only)

Up to 2 moose [1 ANTLERED

BULL] by registration Dec. 1-Jan. 31
permit during the period (Subsistence hunt only)
Dec. 1-Jan. 31, and (To be announced)

season of up to <u>31</u> [14] days may be announced by emergency order.

NONRESIDENT HUNTERS:

1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side, by registration permit only

Sept. 5-Sept. 15
[NO OPEN SEASON]

PROPOSAL 49

EFFECT OF THE PROPOSAL: Hunting seasons and bag limits for brown bear. Decrease the bag limit for brown bear in subunit 17B as follows:

The bag limit for all hunters in Unit 17 for brown/grizzly bears is one bear.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: Based on testimony and recommendations for five proposals concerning brown bears in Game Management Unit 17, the Board during its March 2011 meeting addressed bear hunting opportunity in Unit 17 by increasing the bag limit to 2 bears per regulatory year, changing the season opening date from September 1 to August 20, changing the season closing date from May 25 to May 31, and eliminating the brown bear tag and fee for residents. The intent of the Board in making the regulatory changes was to increase bear hunting opportunity and increase harvests.

During the regulatory year 2011 hunting season, a total of 6 hunters took advantage of the 2 bear per year bag limit; 3 resident hunters and 3 guided nonresidents. With only one year of hunting under the 2 bear per year bag limit, we are unable to evaluate if those changes resulted in increased bear harvests. At this time, the Department has no biological concerns with either the existing or proposed regulations.

PROPOSAL 50

EFFECT OF THE PROPOSAL: Allow the sale of brown bear hides and skulls from Unit 17.

DEPARTMENT RECOMMENDATION: Do Not Adopt

RATIONALE: With the exception of bears taken under a predator control program, articles of handicraft made from the fur of a brown bear, or hides sold by certain individuals such as licensed taxidermists, brown bear hides and skulls are not allowed to be sold. Board policy (2012-198-BOG) indicates that the sale of hides and skulls can be used as an incentive to take bears, but would be used primarily in situations that require active control of bear populations

and only for the minimum amount of time necessary to accomplish management goals. Although passage of this regulatory change may increase brown bear harvests in Unit 17, an undesirable side effect would be the difficulty of identifying bear hides and skulls as coming from Unit 17 bears. The commercial demand for brown bear parts outside of Alaska is considerable, and we would anticipate that this regulation would allow bears parts taken throughout Alaska to be marketed. We would not be able to evaluate to what extent bear populations in other Units would be negatively impacted by this regulatory change.

PROPOSAL 51

EFFECT OF THE PROPOSAL: Change hunting regulations for black bear in Unit 17 to a bag limit of three bears per year and no closed season.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal was submitted at the request of the Board.

The Department does not have any biological concerns associated with this proposal. There are few black bears in Unit 17, and they are infrequently observed. There is little hunting effort directed at black bears (see Table), and harvests are usually incidental to other hunting activities. Reported harvests averaged 8 black bears annually (79% male and 21% female) during the last 6 regulatory years. Residents of upper Nushagak River villages have expressed concerns about the low number of black bears in Unit 17 because they would like to take more of them for meat.

Table. Reported black bear harvests by resident and nonresident hunters in Unit 17 during regulatory years 2006 through 2011.

	2006	2007	2008	2009	2010	2011
Nonresident	12	2	6	4	7	7
Resident	1	3	0	1	0	5
Total	14	5	6	5	6	12

PROPOSAL 52

EFFECT OF THE PROPOSAL: Close nonresident moose hunting seasons in Unit 9.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: As the proposal allocates moose hunting opportunity in Unit 9, the Department does not have a recommendation on this proposal. The board adopted a positive customary and traditional use finding for moose in subunits 9A, 9B, 9C and 9E, and established an amount reasonably necessary for subsistence of 100–140 moose annually (5 AAC 99.025 (a) (8)). Reported harvests averaged 112 moose annually in Unit 9 between regulatory years 2007 (RY07) and RY11. Alaska residents, including local and nonlocal, reported harvesting an average of 55 moose annually in these subunits between RY07–RY11. The remaining 46% were taken by nonresident hunters (average of 54 moose annually)

On average, 354 hunters participate in the Unit 9 moose hunt each year (range 263 to 412 from RY07–RY11). Sixty-six percent of these hunters are residents of Alaska (average of 234 hunters each year), and 41% of the hunters are considered local residents because they reside within the unit (average of 146 hunters each year).

The majority of local resident participation in the hunt occurs in subunits 9B and 9C, while the majority of nonresident participation occurs in subunit 9E. In subunit 9A, there are generally no local participants with an average total of 15 hunters annually, evenly split between nonlocal resident and nonresident hunters. Subunit 9B averages 119 hunters each year; 53 (45%) are local residents, 39 (33%) are nonlocal residents, and 24 (20%) are nonresidents. Subunit 9C averages 98 participants annually. Of these, 67 (68%) are local residents, 17 (17%) are nonlocal residents and 8 (8%) are nonresidents. Finally in subunit 9E with an annual average of 117 participants, 20 (18%) are local residents, 19 (16%) are nonlocal residents, and 77 (66%) are nonresidents.

Nonresident participation in the Unit 9 moose hunts has been declining in recent years. Between RY01–RY06 an average of 173 nonresidents hunted moose in Unit 9 each year compared to an average of 114 between RY07–RY11. Most of these hunters use aircraft to access remote areas that are inaccessible to hunters who reside within the unit.

PROPOSAL 53

EFFECT OF THE PROPOSAL: Establish a Tier II caribou hunt in subunit 9D for the Southern Alaska Peninsula caribou herd.

DEPARTMENT RECOMMENDATION: Amend and Adopt

RATIONALE: Department proposal. See issue statement.

The Department recommends amending the proposal to add a winter season from November 15 to March 31. Adopting a winter season would provide greater access to the caribou for residents in local communities where hunting success is influenced by caribou distribution and travel conditions.

PROPOSAL 54

EFFECT OF THE PROPOSAL: Liberalize bear hunting in Unit 9 by offering brown bear hunts every year with extended seasons, increasing the bag limit to 1 bear per year, waive brown bear locking tag requirement for resident hunters, and retain the locking tag requirement for nonresidents.

Current Season Dates:

Subunits 9A, B, C, & E: October 1 to October 21(odd years)

May 10 to May 25 (even years)

Subunit 9B: September 20 to October 21(odd years)

May 10 to May 25 (even years)

Proposed Season Dates:

Subunits 9A, B, C, D, & E: September 1 to October 31 (every year)

May 1 to May 31 (every year)

DEPARTMENT RECOMMENDATION:

No Recommendation – Liberalization of Brown Bear Hunting Seasons Do Not Adopt – Brown Bear Hunting during Moose Hunting Season

RATIONALE: The intent of this proposal is to reduce the brown bear population and increase moose and caribou calf survival. While the proposed changes would significantly increase brown bear harvests in Unit 9, based on efforts in other areas, it is extremely unlikely that the liberalizations will reduce bear predation on moose and caribou calves. However an unintended consequence of this proposal could be a significant increase in moose harvest during September that would not be sustainable. If the September season for brown bear hunting is adopted, restrictions on moose hunting opportunity should also be adopted to prevent the overharvest of moose from occurring.

Brown bears in Unit 9 are highly sought after because of their reputation for trophy sized bears. High harvest rates and illegal hunting activities in the 1960s and early-1970s caused a Unit-wide decline in the brown bear population by the mid-1970s. Poor salmon escapements in most drainages during regulatory years (RY) 1972 (RY72 = July 1, 1972 through June 30, 1973) and RY73 coincided with the high harvests and exacerbated the situation. At the spring 1975 Board of Game meeting, the present system of alternating seasons (open in the fall of odd-numbered years and the spring of even-numbered years) was adopted to keep harvests sustainable. This system reduced harvests substantially and allowed the bear population to recover. Since RY00 brown bear harvests in Unit 9 have averaged approximately 335 bears annually, an exploitation rate of approximately 6–7%. At this rate of harvest, hunting seasons and bag limits should not be liberalized unless the intent is to move away from trophy bear management in Unit 9.

The proposed seasons will greatly increase harvests, particularly if hunting seasons are allowed to occur every year. Sows and small bears will be more active during the proposed season extensions and may make up a larger portion of the harvest even though most hunters will continue to hunt for large bears. Despite the increased take the resulting harvests will not reduce bear predation on moose or caribou. This conclusion is based on the failure of liberalized seasons and bags to increase calf survival even in areas with comparatively high access and low-density bear populations. In addition, caribou calf mortality studies on the Alaska Peninsula indicate that reducing bear numbers to improve calf survival would not be an efficient management strategy.

If adopted the liberalized bag limit and resident tag fee exemption are not expected to increase harvests. Few hunters take more than 1 brown bear during their life. The amount of interest in bear hunting and hunt costs impose greater limitations on brown bear hunting effort than the

limitations imposed by the current bag limit and the \$25 locking tag fee for residents. Additionally the bag limit change would primarily be utilized by people who live or work in Unit 9 communities. Harvests would primarily occur near these communities where residents can already hunt brown bears during a year-round season with a bag limit of 1 bear per year and no locking tags requirements.

Moose harvests are also expected to increase significantly. Moose densities and calf recruitment are low on the Alaska Peninsula, and regulatory changes that might increase moose harvests should be carefully considered. Currently there are approximately262 moose hunters and 420 fall brown bear hunters. If the bear season is liberalized to overlap with the moose hunting season, moose harvests will increase. Weather conditions in the fall and the increased abundance of bears in easily accessible areas will draw much of the bear hunting effort to the September season. The September season is expected to have additional appeal to bear hunters because it would also allow bear hunters to harvest any legal moose they encounter. Harvesting a moose during a bear hunt would also be desirable since it would also increase the potential of taking a trophy bear at the moose kill site. This combination hunting style and the associated increase in moose harvest will likely be unsustainable for the moose population.

PROPOSAL 55

EFFECT OF THE PROPOSAL: Eliminate the brown bear registration permit hunt near villages in Unit 9 (RB525) and consider replacing it with an "open brown bear hunting season every year to reduce brown bears in "specified areas" that are not specified in the proposal.

DEPARTMENT RECOMMENDATION: Do Not Adopt

RATIONALE: This proposal would replace the Unit 9 brown bear registration hunts near communities (RB525) with a bear hunt for residents that would occur every year in "specified areas". Very few details associated with the proposed hunt are provided including season dates, bag limit, locking tag requirements, or hunt areas.

Under the current regulations people are allowed to shoot problem bears under the Defense of Life and Property regulation, but some residents were reluctant to shoot and report problem bears because they did not want to surrender the bear to the state. The Department designed RB525 to provide residents with another tool to address public safety concerns in communities using a liberal season and bag limit. The Department does not have any suggestions for an alternate hunt structure that would improve upon the opportunities provided by the RB525 hunt.

PROPOSAL 56

EFFECT OF THE PROPOSAL: Liberalize the brown bear bag limit for registration hunts near villages in Unit 9 (RB525) by increasing the bag limit from 1 bear per year to 2 bears per year.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The registration brown bear hunts near Unit 9 communities were designed to reduce bear-human conflicts. While a more liberal bag limit would provide additional opportunity under RB525, the opportunity is currently provided under, the Defense of Life and Property regulation. RB525 is a new hunt that has only been offered for one full regulatory year 2011 (RY11). During RY11 72 hunters registered for the hunt, and 20 brown bears were taken. Of the hunters who harvested a bear, no one reported taking a bear in Defense of Life and Property during the same regulatory year or expressed interest in taking another bear. Based on the limited information associated with this hunt, it is unclear how often the more liberal bag limit would be utilized.

PROPOSAL 57

EFFECT OF THE PROPOSAL: Modify the brown bear registration permit hunt area surrounding the community of False Pass (RB525) as follows: Unit 10, Unimak Island - extend the hunt area 16 miles to the southeast to the furthest point on the Ikutan Peninsula; Unit 9 - include lands between Cape Krenitzin and Sankin Bay.

DEPARTMENT RECOMMENDATION: Do Not Adopt

RATIONALE: The registration brown bear hunt (RB525) was developed to reduce bear-human conflicts in and around communities in Units 9 and 10. In an attempt to focus the harvest on problem bears in Unit 10, the False Pass hunt area was limited to an area within 3 miles of the community. If the hunt area is expanded, the hunt will become increasingly utilized as a trophy harvest opportunity and harvests will likely be too dispersed to address the community's public safety concerns. RB525 is a new hunt that has only been in place for one full regulatory year, and as such, the effectiveness of this regulation to reduce bear-human conflicts has not been fully tested in its current form.

The current proposal would expand hunting opportunity well beyond the perimeter of the community of False Pass where bear-human conflicts in the affected area occur and result in the harvest of bears that do not cause problems in the community; particularly the bears harvested on the Unit 9 mainland, but on Unimak Island as well. A very large commercial fishery in the area attracts many Alaska residents who spend the majority of their time living and working on boats. Because brown bears in Units 9 and 10 are a highly sought after trophy species, adoption of this proposal would greatly increase bear harvests by opportunistic hunters. The Department does not recommend adopting this proposal unless the Board desires to move away from trophy bear management, particularly in Unit 10.

PROPOSAL 58

EFFECT OF THE PROPOSAL: Establish a brown bear registration permit hunt in Katmai National Preserve in subunit 9C with a hunt structure similar to Unit 8 and a quota of 14–19 bears.

DEPARTMENT RECOMMENDATION: <u>Take No Action</u>

RATIONALE: The Department has the authority to create a registration permit hunt for Katmai National Preserve under the existing regulations adopted by the Board. No additional Board actions are required to implement the proposed hunt structure.

Under the current regulations brown bear hunting in subunit 9C is by registration permit only. Using the Department's discretionary authority (5AAC 92.052), the Department could subdivide the permit hunt area into smaller hunt areas if it were necessary, but the Department does not think that establishing a special hunt area in Katmai Preserve will improve our ability to manage bear harvests in the area. Brown bear harvests in Katmai Preserve are sustainable and can be closely monitored under the existing registration hunts (RB368 and RB370).

The Department also does not recommend establishing a unique harvest quota for Katmai Preserve. Brown bears that occupy the Preserve seasonally are part of a larger bear population that moves freely in and out of the area. Use of the Preserve changes seasonally in response to resource availability and can vary on an annual basis. Establishing a quota for a relatively small area would place an unnecessary restriction on harvests during periods of increased bear-use and would not allow harvest pressure to shift in response to changes in bear distribution. If the Board chooses to establish a harvest quota for the Preserve, the Department recommends that adopting a quota that applies to a regulatory year, rather than an annual harvest.

Note: Because bear seasons in Unit 9 occur during alternating regulatory years (open during the fall of odd-numbered years and during the spring of even-numbered years) there could be confusion over whether the quota should be applied annually (per year) or on a regulatory year basis. Adopting an annual quota would limit harvests on a calendar year basis.

PROPOSAL 59

EFFECT OF THE PROPOSAL: Allocate brown bear permits on Unimak Island in Unit 10 based on the proportions of resident and nonresident applicants who applied for the hunt during the past 10 years. Nonresident next-of-kin hunters are applied to the resident hunter permit allocation, not the nonresident allocation. Nonresidents hunting with a guide are required to have a signed guide-client agreement to apply, and the number of guide-client agreements per guide is limited to the number of nonresident permits that are available.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department does not have a recommendation on this proposal because it allocates brown bear hunting opportunity on Unimak Island between residents and nonresidents hunters and allocates guiding opportunity between commercial operators. Board policy (2007-173-BOG) indicates that allocations for specific hunts will be decided individually, based upon historical patterns of nonresident and resident permit use over the past 10 years.

This proposal requests an allocation between residents and nonresidents based on the previous 10 year history of the hunt, and recommends that nonresidents hunting with relatives that are second degree kindred be included in the resident pool. During the past 10 years, the Department issued 15 brown bear drawing permits annually for Unimak Island and 1 governor's tag. Since regulatory year 2002 (RY02) 57% of the drawing permits were issued to resident and 43% to nonresident. The department has no way to determine how many of the nonresident hunters intended to hunt with relatives that are second degree kindred. Additionally it is unlikely that the Department will be able to sort the applicants and allocate permits in the requested manner.

In addition to allocating opportunity for resident and nonresident participation, the proposal also requests that the Department administer the hunt in a manner that allocates guiding opportunity by requiring a guide-client agreement, limit the number of applicants per guide to the number of nonresident permits available, and use a list of alternates to issue unused permits. Beginning in RY09 a guide-client agreement is currently required for nonresident hunters, but the Department still lacks the tools to effectively implement this allocation requirement. The Department anticipates similar difficulties implementing the additional guide-allocation requirements recommended by this proposal.

PROPOSAL 60

EFFECT OF THE PROPOSAL: Restrict wolf hunting and trapping seasons on National Park Service lands in Unit 9 by closing the seasons on April 30.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: If adopted this proposal would only affect wolf hunting and trapping opportunity in Unit 9, because there are no National Park Service lands in Unit 10. The Department has not identified biological concerns for the wolf populations or with the wolf harvests in Unit 9.

Congressional recognition of the authority of the States to manage fish and wildlife on Federally administered lands, including those by the National Park Service, is very evident through legislation in ANILCA Sections 203, 1313 and 1314 and CFR part 24, Department of the Interior Fish and Wildlife Policy: State and Federal Relationships. The Statute and Policy are implemented through the Master Memorandum of Understanding between the Alaska Department of Fish and Game and the US National Park Service (MMOU). The MMOU notes that:

"The taking of fish and wildlife by hunting, fishing and trapping on certain Service lands in Alaska is authorized in accordance with applicable State and Federal law unless State regulations are found to be incompatible with documented Park or Preserve goals, objectives or management plans."

The implementation of management practices, adopted under state management plans that assure sustainability of populations, are not incompatible with documented Park or Preserve goals, objectives or management plans.

PROPOSAL 61

EFFECT OF THE PROPOSAL: Modify the Northern Alaska Peninsula Predation Management area.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department proposal – see issue statement.

PROPOSAL 62

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose drawing hunt for Unit 13.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department proposal. See issue statement.

PROPOSAL 63

EFFECT OF THE PROPOSAL: This proposal would replace existing Unit 13 antlerless drawing hunt (season dates September 1–20) with two antlerless drawing hunts, one to be held in October and another in March, for subunits 13A, 13B, 13C, and 13E. Guidelines for offering antlerless moose seasons and proposed harvest rates are included in the proposal.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department does not have a biological recommendation on whether the antlerless seasons should occur in September (current season) or in October and March, and the proposed guidelines for administering the hunts can be implemented without a regulatory change. If adopted, the department recommends that the bag limit should be one antlerless moose, no calves, or cows accompanied by calves may be taken. This amendment would protect calves, but it would also allow hunters to legally harvest antlerless bulls in a March hunt.

The pros and cons of this proposal hinge on social considerations. Both of the proposed hunting seasons (October and March) occur after the other moose hunting opportunities in Unit 13 are closed (all existing hunts close on September 20). The proposed seasons would help minimize the number of hunters in the field in September. During the month of October, the ground freezes providing access opportunities by foot, off-road vehicle, and perhaps snowmachine for areas difficult to reach during September. By March, snow cover would allow for snowmachine access

to similarly difficult to reach areas, while there is potential for conflicts to arise with trappers in March, many trappers are finished trapping by the end February.

The Department does not have a biological concern with a guideline stating that up to 1% of the cow population can be harvested when a population estimate exceeds the mid-point of the IM objectives. However if a population exceeds the IM objective range at some point in the future and indications of nutritional stress are observed, the department would recommend increasing the antlerless harvest rate to regulate the population.

Of the 10,500 cow moose estimated to be in subunits 13A, 13B, 13C, and 13E in 2011, a 1% harvest rate would allow the harvest of up to 105 cows. At this time, given existing population estimates and objectives (see figure), the moose population exceeds the mid-point of the population objective only in subunits 13A and 13E. However, should the IM objectives in proposal 81 be adopted, the moose population estimate in subunit 13E would no longer be above the mid-point. In subunit 13A, a 1% harvest rate guideline would allow an antlerless take of up to 25 cows.

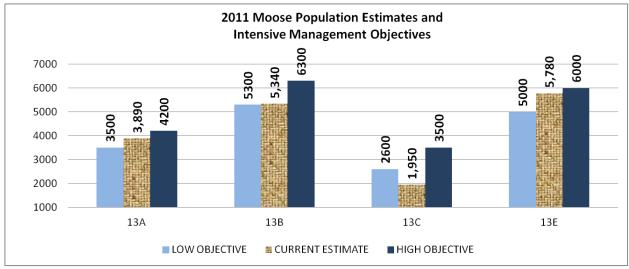


Figure. Unit 13 moose population objectives compared to the intensive management objectives.

The proposal also requests hunt zones to avoid overharvest in localized areas. While zones can be an effective tool to distribute harvests, zones can be difficult to administer and there may be better ways to accomplishing the same goal. Given that the proposed hunts are relatively small based on the current size of the moose population, there is no clear advantage to establishing zones at this time.

PROPOSAL 64

EFFECT OF THE PROPOSAL: This proposal would establish a youth drawing hunt (10–17 years of age) for cow moose in subunit 13A, to be held August 5–15, prior to the existing general season and drawing hunts. Only lone cows could be taken. The proposed harvest rate would be no more than 1% of the cow moose population. The harvested animal would count against the youth and the accompanying adult's bag limit.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal allocates surplus antlerless moose hunting opportunity in Unit 13 to youth hunters. Given the allocation nature of this proposal, the Department does not have a recommendation on how antlerless moose hunting opportunity should be allocated, but it will require guidance on how to allocate hunting opportunity between this youth hunt and other antlerless moose hunts that are open to all Alaskans if the proposal is adopted. Alaska statute 16.05.255 directs the Board to consider providing meaningful youth hunt opportunities (before school starts) when possible. This proposal appears to meet these criteria and there is a harvestable surplus that could be allocated to establish a youth hunt.

The Department does not have a biological concern associated with allowing antlerless moose hunting opportunity in Unit 13 or the proposed harvest rate provided that the moose population meets or exceeds the minimum population objective. However if this proposal is adopted the Department recommends that the bag limit should be one antlerless moose with the taking of calves and cows accompanied by calves be prohibited.

The first half of August can be very warm in Unit 13, and conditions may not be ideal for salvaging a moose in some years. However there are other hunters in the field at that time, including caribou, sheep, and a few moose hunters. The Community Subsistence Harvest (CSH) hunt opens August 10 and many of these hunters are taking moose in this area early in the season.

OVERVIEW OF DEPARTMENT'S COMMENTS ON PROPOSALS AFFECTING UNIT 13 MOOSE AND CARIBOU HUNT STRUCTURES

Seven proposals (Proposals 65–69, 72, and 73) before the Board modify the allocation of hunting opportunity for moose and caribou in Unit 13 and could also have a substantial effect on the administration of these hunts. The subsistence hunts for moose and caribou are uniquely linked. The most important way the hunts are linked is that applicants for subsistence caribou hunts in Unit 13 are not allowed to hunt for moose anywhere in the state except for Unit 13. Under 5 AAC 99.025 (a) (4), the board has found there are positive customary and traditional uses of caribou in units 12 and 13 (Nelchina herd), and under 5 AAC 99.025 (a) (8), positive customary and traditional uses of moose in all of GMU 13. The board has found that the amount reasonably necessary (ANS) for subsistence uses of Nelchina caribou is 600–1,000, and that the ANS for moose is 300–600. Also note that the Copper Basin Community Subsistence Hunt area for moose and caribou is in GMU 13 and portions of GMUs 11 and 12.

The Department recommends that the Board, advisory committees, and the public at large consider the interrelatedness of these proposals and how the proposals affect hunting opportunity under a variety of harvest quota scenarios when evaluating the merits of each proposal.

The Department will also request consideration of various mechanisms to ensure caribou harvest quotas are met during years with very high caribou availability. Nelchina caribou harvest quotas

are set annually by the Department to keep the herd's population size within management objectives. Annual quotas for the herd have ranged from 1,000 to 5,500 since regulatory year 1990 (RY90). While the quotas are a necessary management tool to maintain the long-term sustainability of the herd, the quotas also directly affect both the hunt structure used to administer the hunt and the number of permits issued.

Hunt administration for caribou hunts is regulated by the ANS range established by the Board. In March 2009 the Board established the current ANS of 600–1,000 caribou for the Nelchina herd. Based on the current ANS, when the harvest quota is less than 600 caribou, hunting opportunity is administered under the Tier II hunt structure. Tier II permits (1 caribou bag limit) were used to regulate the Nelchina harvests between RY90–RY08 and in RY10 (based on the previous ANS that was "100% of the harvestable surplus"). When the harvest quota is between 600 and 1,000 caribou, the hunt is managed under a Tier I hunt structure which consists of a Tier I registration hunt (RC566) and the Copper Basin (CSH CC001) which have a one caribou per household bag limit.

When the harvest quota is above 1,000 caribou, hunting opportunity is administered under a "Tier I Plus" hunt structure. The Tier I and "Tier I Plus" hunt structures are resident only hunts. The primary difference is that, in addition to Tier I hunting opportunity (Copper Basin CSH hunt, CC001, and Tier I registration hunt, RC566), the "Tier I Plus" hunt structure allows drawing permits (1 bull bag limit) to be issued to Alaska residents that do not claim a subsistence dependency on the Nelchina caribou herd and these permit holders are not prohibited from hunting moose or caribou outside of Unit 13.

Under the current caribou ANS the Nelchina harvest quota would have been in the "Tier I plus" range since RY87. Under the current "Tier I plus" hunt administration, the board instructed the Department to issue enough drawing permits to provide drawing hunters with about 16% of the opportunity. The 16% allocation is based on previous direction from the board. The 16% allocation (or other possible allocation scenarios) is adequate until the harvest quota exceeds the number of caribou that can be taken through the subsistence hunts (including the federal hunts) plus the designated number of draw hunters. When the harvest quota exceeds that level (currently around 3,600 caribou), the Department understands it is to issue additional drawing hunt permits as required to ensure that the harvest quota is met and all hunts close at the same time. However, the Board may wish to consider implementing a cap on the number of drawing permits or limit the number of drawing permits based on the total number of hunters in the field (CSH, Tier I registration, and draw) in favor of some other way to increase harvest.

Just before the 2012 caribou season opened in August, the Department became aware that the number of permits that had been issued and the anticipated harvest would not be sufficient to provide enough harvest to meet the harvest quota. Consequently, the Department issued 2,175 additional drawing permits (for a total of 3,000, the maximum allowed in current regulation). Despite the effort to increase Unit 13 caribou harvests, there were still over 1,800 caribou remaining in the Nelchina quota by early December. Some additional Nelchina caribou will be taken in Unit 13 prior to the end of the season (March 31), as well as outside of Unit 13 under Fortymile state/federal registration permits in subunit 20E. Even with this additional harvest, it is unlikely that the Nelchina quota will be met this regulatory year.

While the unusually high harvest quota during the 2012 season is unique compared to the recent history of Nelchina caribou hunt management, the Department requires mechanisms to increase caribou harvests during these exceptional years. During the February 2013 meeting the Department will engage the Board in a discussion of potential options to increase harvest when it is needed to maintain the herd within the population objectives. Possible solutions include one or more of the following options:

- 1. Changing the bag limit on the drawing hunts from 1 bull to 1 caribou, allowing the harvest of either sex. In most years, the drawing hunt would remain bulls only. In the exceptional years, the Department may change the bag limit to either sex to ensure that the cow quota is achieved.
- 2. Eliminate the cap on the number of drawing permits (currently 3,000) that can be issued or establish a higher cap.
- 3. Change the bag limit on any or all hunts to "up to 2 caribou". The bag limit would remain 1 caribou, or 1 caribou per household as appropriate, in most years, but the Department would like to have the ability to change the bag limit to 2 caribou when necessary. This would help ensure that adequate harvest of Nelchina caribou is obtained in the fall before large numbers of caribou leave Unit 13 for winter range where they may or may not be accessible. The department would increase the bag limit by issuing a supplement for hunters' existing permits with a bag limit of 1 additional caribou.
- 4. If it appears unlikely that the harvest objective will be met by Unit 13 hunters, allow harvest of Nelchina caribou in the winter Fortymile registration hunt. In most years when the quota is likely to be met or is met, areas of the eastern Fortymile hunt occupied by Nelchina caribou would remain closed.

The Department seeks guidance from the Board on these options because there are elements of allocation inherent in each. In addition, the Department cannot increase bag limits for big game unless authorized in regulation and requests those changes be made. The Department would like to have as many of these tools to ensure harvest as possible.

PROPOSAL 65

EFFECT OF THE PROPOSAL: This proposal requests that the Board of Game separately evaluate the eligibility of every group that wants to participate in the Copper Basin Community Subsistence Harvest (CSH) hunts for moose and caribou and establish independent seasons, bag limits and quotas to meet the group's subsistence pattern of taking and use through the Board of Game proposal process. The proposal also requests that the CSH caribou hunt be managed as an independent quota that does not close when other Unit 13 caribou hunting seasons close and that eligibility for the Unit 13 Tier I registration hunt be based on how the applicant conforms or intends to conform to the customary and traditional use pattern described by the Board for the area.

Under 5 AAC 99.025 (a) (4), the board has found there are positive customary and traditional

uses of caribou in units 12 and 13 (Nelchina herd), and under 5 AAC 99.025 (a) (8), positive customary and traditional uses of moose in all of GMU 13. The board has found that the amount reasonably necessary (ANS) for subsistence uses of Nelchina caribou is 600–1,000, and that the ANS for moose is 300–600. Also note that the Copper Basin Community Subsistence Hunt area for moose and caribou, which the board has adopted at 5 AAC 92.074 (d), is in GMU 13 and portions of GMUs 11 and 12.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal seeks to establish new requirements for the administration of the Tier I caribou hunts in Unit 13, both the CC001 CSH and the RC566 registration hunt. The Department does not have a recommendation on whether or not the Board should adopt these requirements as they relate to the allocation of hunting opportunity.

Under the current system, CSH group eligibility is initially determined by whether a group or community meets a minimum number of participants, if they have correctly filled out the application forms, if they have met all permit reporting requirements from the previous regulatory year, and if they have not applied for other caribou or moose hunts outside the area. Eligibility for future years is evaluated by Department staff, who review the CSH application forms, the Failure to Report list, the permit hunt application database, and written reports submitted by group coordinators after the hunting season.

To help with the newer hunt condition of annual reports, the Department has developed a CSH Annual Written Report Review Guide to evaluate the extent to which each group is voluntarily attempting to participate in and establishes a pattern of subsistence use consistent with the board's Unit 13 findings at 2006-170-BOG and 2011-184-BOG, and the customary and traditional use pattern described in the Department's application materials.

Division of Subsistence staff evaluated annual written reports for 15 CSH groups in regulatory year 2011 (RY11): 6 for caribou and 8 for moose (1 moose group did not submit a completed report). Based on the Department's established evaluation criteria, 11 reports were approved and 4 received conditional approval. The reports receiving conditional approval did not meet the reporting requirements because they were not comprehensive in their explanation of the group's efforts to observe the customary and traditional use pattern described in the board's findings. The groups were given conditional approval to participate in RY12 CSH hunts with the understanding that future reports must be more comprehensive.

Adopting the recommended CSH requirements would eliminate the eligibility of all CSH groups, other than the Ahtna group, until each group brings a proposal to the Board. The Department is concerned that if the board adopted individual season dates and bag limits for individual CSH groups, the CSH hunts would become more complex and administratively difficult to manage as the number of groups and unique seasons increased. This is particularly true for moose, where additional opportunity to harvest moose under the "any bull" bag limit could lead to overharvest in accessible areas if not managed closely. Harvest quotas would have to be apportioned spatially in Unit 13 to avoid overharvesting the resource.

In addition to establishing more rigorous eligibility requirements, the proposal also requests that the CSH caribou allocation be managed independently as a quota and that the CSH hunt remain open until the established allocation of 300 caribou have been harvested or the end of the regularly scheduled season is reached. Currently, the Department manages the CSH harvest with all other state caribou hunting seasons in Unit 13 (Tier I registration and drawing). In general, all hunts close simultaneously when the harvest quota for the Nelchina caribou herd is attained (based on direction provided by the Board in January 2012). However, since the Board supported the permit language that "up to 300 caribou may be taken" for the CSH hunt, it may close earlier than other hunts if the limit of 300 caribou is taken.

PROPOSAL 66

EFFECT OF THE PROPOSAL: This proposal repeals the Unit 13 Copper Basin CSH moose hunt (CM300) and the Copper Basin Community Subsistence Hunt area (5 AAC 92.072 and 5 AAC 92.074) and replaces it with two resident registration moose hunts. The proposal also seeks to create a road corridor, and for the area inside the highway corridor (in Unit 13), establish a resident "weighted" drawing hunt for any bull and/or cow moose with season dates of September 1–20. Drawing hunt conditions would allow one permit per household, would prohibit applicants from applying for moose permits in any other unit that year, and would require all edible meat be taken from the field on the bone. Outside the highway corridors, a resident registration general moose hunt would be established with a bag limit of 1 bull with spike-fork or 50" antlers or greater or 3 or more brow tines, with a season of September 1–20. Finally, a nonresident drawing hunt is proposed (50" antlers or greater or 4 or more brow tines) if the maximum harvest objective identified in 5 AAC 92.108 is met, by subunit.

DEPARTMENT RECOMMENDATION:

No Recommendation – Allocation of moose hunting opportunity <u>Do Not Adopt – Road corridor hunt structure</u>

RATIONALE: The Department has no recommendation on the allocation of hunting opportunity that would be imposed by the proposed permit hunt structures (registration and weighted draw). Subsistence hunting opportunity cannot, by law, be awarded by chance (e.g., through a drawing), which is one reason for the Department's recommendation of Do Not Adopt for the road corridor hunting structure. Additionally, the Department does have a concern with the proposed bag limits (3 brow tine restriction outside of the corridor and "any bull" or cow within the corridor) and with how effectively the proposed hunts can be managed to keep moose bull:cow ratios within the objectives and prevent overharvests. If the legal elements of the proposal are adopted, the Department will need guidance on how harvests should be managed. Specifically, will the management goal be to maintain the subunit bull ratios at or above the management objective of 25 bulls:100 cows or will it be to maintain bull ratios in smaller highly accessible hunt areas at or above the objective?

Based on a discussion with the proposal authors, they indicated that they were interested in a corridor width of either 2 or 5 miles.

Past experience in Unit 13 indicates a general season of spike/fork or 50" antlers or greater or 3

or more brow tines (regulatory years 1993–2000) can reduce bull ratios to unacceptably low levels (Unit-wide bull ratios averaged 19 bulls per 100 cows; below the objective of 25 per 100). Even though the proposed hunt structures can limit hunter participation through the number of permits issued and hunt closures, it is unknown if the proposed registration hunt can be administered in a way that would prevent an overharvest unless harvests are managed very conservatively. Additionally, the moose surveys conducted in Unit 13 are not designed to monitor moose population trends and bull:cow ratios along road corridors. As a consequence, it will be very difficult to determine how bull harvest quotas should be distributed to achieve management goals. It will also be very difficult to evaluate the cow hunting opportunity and distribute harvests along the road corridor. With no clear biological goal that the Department can use to issue permits, the Board will need to provide guidance on how harvest opportunity should be allocated between the registration hunt and the nonresident drawing permit hunt.

Existing "any bull" drawing moose hunting opportunities in Unit 13 were designed to take advantage of the underutilized harvestable surplus in difficult-to-access areas. Since regulatory year 2009 (RY09), Unit 13 has had five "any bull" drawing hunt areas where bull ratios exceed objectives. Outside these hunt boundaries, with exception of controlled use areas, bull ratios are generally lower. "Any bull" drawing hunts are simple and permit numbers are adjusted annually to reflect the estimated available surplus of bulls. This is in contrast to registration hunts where quotas must be set annually, and hunts may have to be closed in-season by Emergency Order. No "any bull" drawing hunts currently exist along the road system in Unit 13.

Based on RY11, the harvest of moose in 13A and 13D was within the Intensive Management objective range specified for each subunit; the harvests in 13B, 13C, and 13E remain below the objective range specified for each subunit. No subunit is currently above the objective range. If the legal elements of this proposal were adopted, no nonresident hunting would be allowed in Unit 13.

Since RY12, Unit 13 has had one antlerless hunt (DM325) in western subunit 13A, where the moose population is within the population objectives. Only 10 permits were issued in RY12; 4 cows were harvested. If the legal elements of this proposal were adopted, it is unclear if permits could still be issued for this hunt area or how cow harvests could be limited to areas that can support the harvest under the proposed hunt structure.

Under 5 AAC 99.025 (a) (8), the board has found there are positive customary and traditional uses of moose in all of GMU 13. The board has found that the amount reasonably necessary (ANS) for subsistence uses of moose is 300–600. Also note that the Copper Basin Community Subsistence Hunt area for moose and caribou, which the board has adopted at 5 AAC 92.074 (d), is in GMU 13 and portions of GMUs 11 and 12.

PROPOSAL 67

EFFECT OF THE PROPOSAL: This proposal asks to repeal the Copper Basin CSH hunt area

and the Unit 13 Tier I caribou hunts (the CSH CC001 hunt and the RC566 hunt) and establish a weighted subsistence drawing hunt (no details were provided on how to weight the drawing).

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department has no recommendation on the allocative aspects of this proposal, though distribution of permits through a drawing may not provide reasonable opportunity for subsistence users. The Tier I hunts referenced in this proposal are for the Nelchina Caribou Herd (NCH) in Unit 13. The existing hunts and the proposed hunt structure are limited to residents only, but the proposal would change how permits are distributed. Based on a concept discussed at the October 2010 special Board meeting for Unit 13, the Department presumes that the proposed weighted draw would issue permits based on a combination of the randomized drawing process and the applicant's Tier II application score, giving a higher probability of randomly drawing a permit to applicants with higher scores.

The Copper Basin CSH area is described at 5 AAC 92.074 (d). The procedures for establishing areas and other general hunt conditions are described at 5 AAC 92.072. Both are statewide provisions. Also note that the Copper Basin Community Subsistence Hunt area for moose and caribou is in GMU 13 and portions of GMUs 11 and 12.

The Copper Basin CSH (CC001) and the registration (RC566) hunts are both managed as registration hunts with an early application period. One permit is issued per household with a bag limit of 1 caribou. The only other state hunting opportunity for the NCH is by drawing permit. In regulatory year 2012 (RY12) the drawing hunt was divided into four hunt areas, DC480–DC483.

During RY11 all of the state caribou hunts in Unit 13 were closed by Emergency Order in early December to avoid exceeding the harvest quota of 2,400 caribou. The NCH quota was increased to 5,500 caribou in RY12. The herd is above population objectives, and the unusually high harvest quota was designed to reduce the size of the herd. If the quota is reached, all state NCH hunts will be closed by Emergency Order at the same time. When the CSH hunters reach their established limit of 300 caribou at any time, the CSH hunt will be closed by Emergency Order.

The CSH caribou hunt had a total of 338 participating households in RY11and 403 in RY12. The CSH hunters harvested 87 caribou in RY11, and a preliminary 125 in RY12 (the hunt is open through March 31 unless closed by Emergency Order). The RC566 hunt had 3,148 participating households in RY11 and 5,045 in RY12. The RC566 hunters harvested 1,625 caribou in RY11, and a preliminary 2,323 in RY12 (the hunt is open through March 31 unless closed by Emergency Order).

A total of 1,127 drawing permits were issued in RY11, and 3,000 permits in RY12. Drawing hunters harvested a total of 319 caribou in RY11. To date, a preliminary 874 caribou have been taken by drawing hunters (the hunt is open through March 31 unless closed by Emergency Order). The four drawing permit hunt areas were expanded to include all of Unit 13 in RY12 to increase harvests and limit herd growth.

Under 5 AAC 99.025 (a) (4), the board has found there are positive customary and traditional

uses of caribou in units 12 and 13 (Nelchina herd). The board has found that the amount reasonably necessary (ANS) for subsistence uses of Nelchina caribou is 600–1,000.

. The total harvest of Nelchina Caribou from all hunts in RY11 was 2,501.

PROPOSAL 68

This proposal addresses 5 AAC 92.072 and 92.074 which are statewide regulations. Any changes made to these proposals would affect other community subsistence harvest hunts, such as in the Chalkyitsik Community Harvest Area for moose (5 AAC 92.074 (b)) or the Yukon Flats Community Harvest Area for black bears (5 AAC 92.074 (c)).

EFFECT OF THE PROPOSAL: Increases the minimum number of people necessary to establish a community subsistence harvest group/community from 25 to 50.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The department does not have a recommendation because this proposal affects opportunity to participate in the CSH hunts. The final regulatory year 2012 Copper Basin CSH eligible group/members were as follows:

Caribou – CSH groups for caribou hunting in Unit 13 during regulatory year 2012.

Group	Group Name	No. of Households	No. Individual Participants
1	Tolsona Caribou	14	36
2	Reed Lake	11	26
3	Cohoe Providers	26	38
4	Hendon	14	25
5	Russel	13	36
6	Cal's Group	11	30
7	Dalzell Clan	13	25
8	Ahtna Community Subsistence Harvest Prog.	148	271
9	GMU 13 Traditional Users Group	18	38
10	Matanuska Village	30	68
11	Lazy Mountain Hunters	10	30
12	Long Timers For Caribou	14	33
13	Alaska Sourdough Community	13	28
14	Kenny Lake Homesteaders	19	35
15	Cordilleran	22	42
16	Meadow Lakes Nomads	19	34
17	Efficient Economical Harvest	8	33
·	·	403	828

Moose - CSH groups for moose hunting in Units 11, 12, and 13 during regulatory year 2012.

		No. of	No. Individual
Group	Group Name	Households	Participants
1	Tolsona Moose	16	39
2	Reed Lake	14	35
3	Hendon	15	27
4	Russel	13	36
5	Urban Culture Delegation	50	101
6	Cal's Group	11	30
7	Dalzell Clan	13	25
8	Ahtna Community Subsistence Harvest Prog.	160	289
9	GMU 13 Traditional Users Group	17	34
10	Matanuska Village	29	64
11	Lazy Mountain Hunters	10	30
12	Long Timers For Moose	14	30
13	Aksala	12	29
14	Alaska Sourdough Community	13	28
15	Kenny Lake Homesteaders	20	37
16	Cordilleran	20	40
17	Wasilla Moose Hunters	7	28
18	Meadow Lakes Nomads	19	34
19	Efficient Economical Harvest	8	33
		460	969

PROPOSAL 69

EFFECT OF THE PROPOSAL: Increases the quota of "any bulls" allowed for the Unit 13 Copper Basin CSH hunt from 70 to "up to 100" moose.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The department has no recommendation due to the allocative nature of this proposal. If the "any bull" moose quota is increased, the number of moose available to other moose hunters would be reduced.

The recommendation to limit the number of "any bulls" to 70 moose was based on the low bull ratios that were below management objectives observed in accessible hunt areas during November 2010. Ratios were particularly low between the Susitna and Maclaren rivers in central subunit 13B (21 bulls:100 cows), the Upper Gakona in western 13C (22 bulls:100 cows), and between Eureka and the Oshetna River in western 13A (21 bulls:100 cows). These areas are easily accessible and well utilized by CSH hunters (August 10 – September 20, "any bull" hunt) in RY09 and early season general moose hunters (August 15–25; spike/fork/>50"/3brow tine hunt) in RY10. Ratios increased somewhat in these areas by November 2011, but remain near the objective of 25 bulls per 100 cows.

The "any bull" harvest quotas were distributed across the CSH hunt area in RY11 and RY12 (Table 1) to maintain bull ratios near objectives across the subunit. Given the number of Copper Basin CSH and drawing permit hunters, the "any bull" quotas have been reached quickly (Table 2).

Table 1. Distribution of the CSH "any bull" harvest quota and harvests during regulatory year 2012.

"Any	"Any	Hunt Area	General Season Antler Restriction
Bull ["]	Bull"		
Limit	Take		
none	None	Open portion of Unit 12	Spike/fork, or 50" antlers, or 4 or more brow tines
12	15	subunit 13A	Spike/fork, or 50" antlers, or 4 or more brow tines
17	22 ^a	subunit 13B	Spike/fork, or 50" antlers, or 4 or more brow tines
10	14	subunit 13C	Spike/fork, or 50" antlers, or 4 or more brow tines
8	7 ^a	subunit 13D	Spike/fork, or 50" antlers, or 4 or more brow tines
13	15 ^a	subunit 13E	Spike/fork, or 50" antlers, or 4 or more brow tines
10	0	Unit 11	Spike/fork, or 50" antlers, or 3 or more brow tines

^a Additional bulls taken by CSH hunters under the federal regulations in RY12 were as follows: 1 in 13B, 1 in 13D, and 1 in 13E (*preliminary data*). Because federal hunt managers do not collect antler size information, we cannot assign these bulls to the categories above.

Table 2. Copper Basin CSH moose hunt Emergency Order^a dates, regulatory years 2011 and 2012

	2011 ^b	2012 ^b
13A	August 17	August 15
13B Denali Highway	August 12	No hunt
13B Remainder	No EO issued	September 3
13C	No EO issued	September 17
13D	August 17	August 28
13E	No EO issued	September 13
Unit 11	No EO issued	September 17

^a Emergency Orders change bag limit from "any bull" to the general season antler restrictions ^b Season dates August 10 – September 20

Under 5 AAC 99.025 (a) (8), the board has found there are positive customary and traditional uses of moose in all of GMU 13. The board has found that the amount reasonably necessary (ANS) for subsistence uses of moose is 300–600. Also note that the Copper Basin Community Subsistence Hunt area for moose and caribou, which the board has adopted at 5 AAC 92.074 (d),

is in GMU 13 and portions of GMUs 11 and 12.

PROPOSAL 70

EFFECT OF THE PROPOSAL: This proposal would eliminate the existing drawing moose hunt for nonresident hunters in Unit 13 and allow nonresidents to hunt under the general season.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department does not have a recommendation because of the allocative nature of this proposal. The proposal does not recommend new season dates or bag limits for nonresidents, so it assumed that both will remain the same if this proposal is adopted. The current Unit 13 moose hunting season for nonresidents is September 1–20 with a bag limit of 50" or 4 or more brow tines.

Nonresidents last participated in the general season hunt from regulatory years 1993 (RY93) through RY01. An average of 193 (range = 115–247) nonresidents reported hunting each year. Nonresidents harvested an average of 76 bulls (9% of the total harvest), with an average success rate of 39%.

Nonresident moose hunting seasons were closed between RY02 and RY08. During that period, the total harvest increased from 574 to 735 moose. Starting in RY09, five nonresident drawing hunts have been offered, one for each subunit. Between RY09 and RY11, an average of 77 (range = 50–115) nonresident permits have been issued annually. An average of 43 nonresident permittees reported hunting annually, and an average of 14 were successful each year (33% success rate). Nonresident hunters comprised less than 1% of the moose hunters in RY11 and harvested 1.7% of the moose taken. The RY11 Unit-wide harvest was 944 moose.

PROPOSAL 71

EFFECT OF THE PROPOSAL: This proposal would eliminate the drawing moose hunts for nonresident hunters in Unit 13, and would establish a new nonresident drawing moose hunt in subunit 13B outside a 5-mile corridor on each side of the Richardson Highway.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The department does not have a recommendation due to the allocative nature of this proposal.

Since RY09, five nonresident drawing hunts have been offered for moose hunting in Unit 13, one for each subunit. Between RY09–RY11, an average of 77 (range = 50–115) nonresident permits have been issued annually. An average of 43 nonresident permittees reported hunting annually, and an average of 14 were successful each year (33% success rate). Nonresident hunters comprised less than 1% of the moose hunters in RY11 and harvested 1.7% of the moose taken.

Nonresident moose hunters in subunit 13B (DM336) harvested 1 bull in RY09, 3 in RY10, and 1 in RY11. Only the first bull taken in RY09 was taken within 5 miles of the Richardson Highway. The RY11 Unit-wide harvest was 944 moose.

PROPOSAL 72

EFFECT OF THE PROPOSAL: Eliminate the Unit 13 Tier I Nelchina Caribou hunt (RC566) requirement that permittees may not hunt moose outside Unit 13 during the same regulatory year.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Tier I registration hunt (RC566) for Nelchina Caribou is a subsistence hunt in Unit 13. Any household that applies for the hunt receives one caribou permit and must agree to the hunt condition that no one in the household can hunt moose or caribou outside Unit 13 during the same regulatory year. The hunt conditions were developed to reflect the customary and traditional patterns of caribou use in this area, including the dependence on multiple resources in this area. Anyone who does not want to participate in the hunt under the permit restrictions can apply for a drawing permit.

The Tier I (RC566) hunt had 3,148 participating households in regulatory year 2011 (RY11). Despite an early Emergency Closure, RC566 hunters were able to harvest 1,625 caribou. During RY12, the number of RC566 households increased 60% to 5,045.

Drawing hunts have also been offered to Unit 13 Nelchina Caribou hunters since RY11. A total of 1,127 drawing permits were issued in RY11, and 3,000 permits were issued in RY12. Drawing hunters harvested a total of 319 caribou in RY11 prior to the Emergency Closure. Unlike the subsistence hunters, the drawing hunt permittees are allowed to hunt moose or caribou outside of Unit 13 during the same regulatory years that their Unit 13 permit is valid. For RY12, the numbers of applicants for the four drawing permit hunts were 5,116, 2,436, 7,826, and 7,493 for DC480-483 respectively. While many applicants likely applied for more than one of these drawing hunts, the overwhelming interest in Nelchina Caribou is evident.

The last time an open registration hunt was held for the Nelchina Herd in Unit 13 was in RY97. A total of 25,376 registration permits were issued, with a bag limit of one cow or one antlered bull with 6 or fewer tines on one side. This was in addition to 10,000 Tier II bull permits issued the same year.

There is no way to determine how many more households would apply for the RC566 hunt if the restriction limiting participation in other hunts is removed, but we would anticipate a large increase in the number of applicants. If RC566 permit numbers increased significantly, the long-term result would be shorter seasons.

The proposer expressed concern that the restriction on hunting moose or caribou outside of Unit 13 has resulted in increased pressure on the moose population (see Figure). While the

requirement does impose a restriction on where Unit 13 subsistence caribou hunters can hunt moose, many of the hunters affected by this restriction would likely shoot a moose if they encounter a legal animal during their caribou hunt (combo hunt) regardless of the RC566 permit restriction. A much stronger influence on the number of moose hunters in Unit 13 is the increase in the moose population due to Intensive Management and the increase in caribou hunting opportunity. Based on the influence these factors have had in the past, it would be difficult to attribute much of the recent increase in the number of moose hunters to the RC566 permit restriction, and it is unlikely that the number of moose hunters would decrease significantly if the restriction were removed.

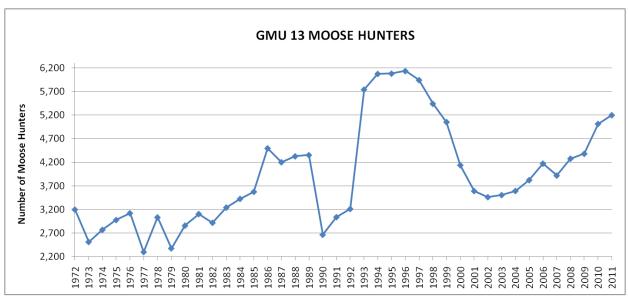


Figure. Number of moose hunters that reported hunting in Unit 13, regulatory years 1972 through 2011.

Under 5 AAC 99.025 (a) (4), the board has found there are positive customary and traditional uses of caribou in units 12 and 13 (Nelchina herd). The board has found that the amount reasonably necessary (ANS) for subsistence uses of Nelchina caribou is 600–1,000. Under 5 AAC 99.025 (a) (8), the board has found there are positive customary and traditional uses of moose in all of GMU 13. The board has found that the amount reasonably necessary (ANS) for subsistence uses of moose is 300–600.

PROPOSAL 73

EFFECT OF THE PROPOSAL: Eliminate the Unit 13 Tier I Nelchina Caribou hunt (RC566) requirement that permittees may not hunt moose outside Unit 13 during the same regulatory year.

DEPARTMENT RECOMMENDATION: Take No Action

PROPOSAL 74

EFFECT OF THE PROPOSAL: This proposal asks to allow brown bear baiting over registered black bear bait stations in subunit 13D with prior baiting history.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: If this proposal is adopted, brown bear harvests in subunit 13D are expected to increase, but the Department does not have a biological concern associated with the anticipated increase. There are no density estimates for black or brown bear in subunit 13D, but populations of both species are thought to be relatively high because of the availability of salmon throughout the summer months. The reported harvests of brown bears have averaged 23 bears (72% male) annually for the last 3 regulatory years.

This proposal provides a framework by which brown bears could be harvested over bait. Hunters with a prior black bear baiting history in subunit 13D (having registered, actively baited, and hunted over registered bait sites) for each of three prior regulatory years, would be allowed to take brown bear over bait under existing black bear baiting regulations. Hunters would be required to abide by all current brown bear hunting regulations, including the 1 bear per year bag limit. Brown bears taken over black bear baiting stations must be reported to ADF&G within 5 days of harvest. The taking of brown bears over registered black bear baiting stations in subunit 13D may be suspended by emergency order.

Large portions of subunit 13D are thickly forested with rough topography, making bear hunting under general hunting regulations more challenging than in other subunits of Unit 13 with more open terrain. Most black bear hunters in the area use baiting as a preferred hunting method. Bait stations in the subunit are principally concentrated along the Richardson Highway and the Klutina Lake Road, as access to the remainder of the subunit is limited. Between regulatory years 2006 (RY06) and RY10, the average annual number of black bear baits registered in subunit 13D was 64 (see Table). RY11 was the first year guides could register up to 10 bait stations in the area, and the number of bait stations in the subunit increased to 95.

Table. Number of Registered Bait Stations in subunit 13D, regulatory years 2000 through 2011.

Subunit	2003	2004	2005	2006	2007	2008	2009	2010	2011 ^a
13D	44	54	37	47	70	58	83	62	95

^a First year guides were allowed to register up to 10 bait stations per area.

Starting in RY10 in accordance with 5 AAC 92.104(e), "permanently wheelchair-bound or similarly disabled" hunters were able to apply for methods and means exemption permits to harvest brown bears over black bear bait stations in Unit 13. Multiple permits have been issued for each of the past two years. Two brown bear were harvested over registered black bear baiting stations in the Copper River Basin during RY11.

PROPOSAL 75

EFFECT OF THE PROPOSAL: This proposal asks to allow brown bear hunting over registered bait stations in all of Unit 13.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The brown bear population in Unit 13 is well above the Board adopted objective of 350 bears, and there are no biological concerns associated with the anticipated increase in harvests if this proposal is adopted. Brown bear harvests in Unit 13 have been relatively stable since the mid 1990s, ranging from 117 to 166, with an average of 138 (58% male) over the last 5 regulatory years (RY07–RY11). We would expect an initial increase in brown bear harvest during the first few years if baiting is allowed before harvests stabilize again in succeeding years.

Starting in RY10 in accordance with 5 AAC 92.104(e), "permanently wheelchair-bound or similarly disabled" hunters were able to apply for methods and means exemption permits to harvest brown bears over black bear bait stations in Unit 13. Multiple permits have been issued for each of the past two years. Two brown bear were harvested over registered black bear baiting stations in the Copper River Basin during RY11. The table below is provided to show the number bear bait stations in Unit 13 and the trend in baiting activity over time.

Table. Number of Registered Bait Stations in Unit 13, regulatory years 2002 through 2011.

Subunit	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
13A	16	11	10	7	8	9	17	20	14	22
13B	2	1	2	5	0	1	2	3	1	3
13C	4	3	8	7	4	5	3	7	6	4
13D	54	44	54	37	47	70	58	83	62	95
13E	29	29	37	36	18	21	29	28	31	29

PROPOSAL 76

EFFECT OF THE PROPOSAL: This proposal asks to establish a subunit 13D brown bear baiting season/permit that coincides with the Unit 13 spring black bear baiting season (April 15 – June 30), and that brown bear baiting be administered in the same manner as black bear baiting.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale for Proposal 74.

PROPOSAL 77

EFFECT OF THE PROPOSAL: This proposal asks to allow brown bear hunting over black bear bait stations in all of Unit 13 with shorter season dates (April 15 – May 31) than existing season for black bear baiting (April 15 – June 30).

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal is similar to Proposal 75, except that the author suggests a shorter brown bear baiting season would reduce conflict with fisherman in June, however the black bear bait stations will still be in use in June. See rationale for Proposal 75.

PROPOSAL 78

EFFECT OF THE PROPOSAL: This proposal asks to add an August 20 – October 31 season to black bear baiting and to allow brown bear baiting over registered black bear bait stations for both spring and fall seasons in subunit 13D. Spring meat salvage requirements would also be extended to brown bears harvested over bait.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The effect of adding a fall bear baiting season in this area is unknown. Similar to other proposals to liberalize bear harvests by increasing bear baiting opportunity, there is no way to anticipate the amount of interest in these opportunities or the increase in harvests that would occur if the proposal is adopted. However the Department has not identified any biological concerns for the bear populations in subunit 13D, and it is not likely that the increased harvests would be detrimental. See rationale for Proposal 74 for additional information.

PROPOSAL 79

EFFECT OF THE PROPOSAL: This proposal requests that a \$25 resident brown bear tag be required for all National Park Service lands.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: Brown bear locking tags are not required on National Park Service (NPS) lands in Units 11, 13, 16, and 17. Very limited brown bear harvests occur on NPS lands in these Units, generally due to lack of access. In regulatory year 2011 (RY11), only 5 brown bears were taken in all of Unit 11 (12,784mi²) by resident hunters. Five bears were taken in Denali National Preserve in RY11. There is very little NPS land in Units 13 and 17, and no brown bears were sealed from these areas in RY11. Similarly no bear harvests were reported in Lake Clark National Preserve in subunit 16B in RY 11.

PROPOSAL 80

EFFECT OF THIS PROPOSAL: This proposal modifies the Intensive Management (IM) moose population and harvest objectives for subunit 13B as follows:

 Subunit
 Moose Population
 Moose Harvest

 Objective Range
 Objective Range

 13B
 4,000-5,000 [5,300-6,300]
 248-280 [310-620]

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal recommends reducing the moose population and harvest objectives for subunit 13B. There was a reference to deep snow in spring 2012 and perceived low calf production in general, but the numbers presented are inaccurate.

While the subunit 13B moose population has been increasing over the past decade, there are no indications that the population is unsustainably high. In spring 2012, 15 female moose calves (10-month of age) were captured and weighed, 11 of which were fitted with radio collars. An additional 18 adult cow moose were also captured and fitted with radio collars. Based on pregnancy testing results, 15 of 18 adult cows were pregnant (83%). Despite relatively deep snow, calf weights averaged 359 pounds which was similar to weights observed in western subunit 13A between 1995 and 2004 (average = 351 lbs, n=77). Of the radiocollared moose, 2 calves died between April and May, and one additional calf died as a yearling between May and September. Adult survival was high during the monitoring period based on the sample of collared adults (no adult mortality for the collared moose).

The IM population objective range of 5,300–6,300 moose for subunit 13B was originally set in the early 1990s. For the entire subunit, this equates to a density of 1.4–1.6 moose per mi² (for area < 4000ft elevation, the range would be 1.9–2.3 moose per mi²). Survey methods and population estimation technique have been consistent through time. Two large trend count areas covering 1,505mi² (55% of available moose habitat in the subunit) are flown annually (post-hunting season). Count data are extrapolated to the remainder of the subunit, and a 10% sightability correction factor is applied. In 2011, the subunit population estimate was 5,300 moose (1.8 moose per mi²). The survey composition was 36 bulls per 100 cows and 25 calves per 100 cows, and the estimated total number of cows, bulls, and calves in the subunit were 3,300, 1,200, and 800. While fall calf ratios are moderate in subunit 13B, and below the objective of 30 calves per 100 cows, fall calf ratios alone are not an indication of herd productivity. These ratios represent a combination of how many calves were born and how many survived to fall.

The harvest objective range of 310–620 for subunit 13B was based on projected potential harvest rates of 6–10%. The original intention was to harvest bulls and cows when the population was high. While short of objectives, the annual bull moose harvest has increased significantly in recent years, climbing from 125 in regulatory year 2001 (RY01) to 304 in RY10. Harvest declined to 266 in RY11, likely due to changes in hunting opportunities. For RY11, the harvest rate was estimated to be 5% (18% of all bulls). With an estimated 3,300 cows in the subunit, a limited opportunity also exists to harvest cow moose at this time. A small cow harvest would increase the overall harvest to within IM objective range, and would help stabilize this population.

While additional moose survey data should be available prior to the February 2013 meeting, no existing data indicate nutritional stress or support reducing the subunit 13B moose population or population objectives.

PROPOSAL 81

EFFECT OF THE PROPOSAL: This proposal modifies the Intensive Management (IM) moose population and harvest objectives for Unit 13 by subunit as follows:

Subunit	Moose Population	Harvest Objective	Harvest Objective Range:
	Objective Range		
13A	3,500–4,200	7%	245–294 [210–420]
13B	5,300-6,300	5%	265–315 [310–620]
13C	2,000–3,000 [2,600–3	3,500] 5%	100–150 [155–350]
13D	1,500–2,200 [1,200–	1,900] 5%	75–110 [75–190]
13 E	5,500–6,500 [5,000–6	6,000] 5%	275–325 [300–600]

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Intensive Management (IM) moose population and harvest objectives for Unit 13 have not been revised since they were originally established in the early 1990s (Table 1). Objectives for Unit 13 were originally developed based on projected potential harvest rates of 6–10% from a high sustainable population. Considering that the moose population in this area has experienced a dramatic decline and subsequent increase since the objectives were established, this may be a good time to re-evaluate the objectives.

The authors of this proposal believe the current moose populations and harvests (Table 2) throughout Unit 13 are acceptable and healthy. They base their proposed population objectives on current size of the moose populations with some room for growth.

Based on a review of the historical moose trend count data and population estimates, both the current population objectives and the proposed objective ranges are attainable on a subunit basis with the exception of subunit 13C where the current population objective is likely set too high relative to the quality of the moose habitat found in that subunit. Nutritional indices available for the Unit 13 moose population indicate existing moose densities are sustainable. Because there are no biological concerns associated with either set of population objectives the Department does not have a recommendation changing population objectives in most subunits, although the Department does support reducing the subunit 13C population objective to reflect a population size that is reasonably attainable. If the proposed population objectives are adopted, the Unitwide population objective range would change from 17,600–21,900 to 17,800–22,200.

Similarly the Department does not have a recommendation on changing the moose harvest objectives in Unit 13, other than to note that the proposed harvest objectives are more attainable. Moose harvests have increased in Unit 13 from 468 moose in regulatory year 2001 (RY01) to 943 moose in RY11. Harvest opportunities have been liberalized in recent years, helping to increase the take. The highest historical harvests occurred during the mid 1960s averaging 1,500 moose each year, though these levels proved unsustainable. Harvests through the mid 1970s were much lower, ranging 620 to 790. Since 1971, annual harvests have exceeded 1,000 moose only five times. If the proposed harvest objectives are adopted, the new Unit-wide harvest

objective range would change from 1,050–2,180 to 960–1,194.

The department recommends continued discussion of the harvest objective for subunit 13E. Of the 7,211 mi² in this subunit, nearly 1,400 mi² are within Denali National Park and Preserve, an area where intensive management does not occur. In addition, there is approximately 1,300 mi² between the middle Susitna and the Talkeetna Rivers where hunter access is currently limited. The remaining 4,500 mi² of subunit13E will continue to support the vast majority of the moose harvested in the subunit. At current harvest levels (180 total moose) the harvest level in subunit13E is 4.0 moose per 100mi². It may not be possible to achieve even the proposed harvest of 275–325 moose annually given existing access.

The proposed harvest objective of 275–325 moose in subunit 13E equates to a harvest level of 6.1–7.2 moose per 100 mi². This is similar to the current harvest of 6.9 moose per 100 mi² (266 total moose) in adjacent subunit 13B. The proposed objective harvest range of 265–315 for subunit 13B equates to 6.9–8.2 moose per 100 mi². If the board wishes to adjust objectives for Unit 13, the department believes the proposed objectives for subunit 13E to be more attainable than the existing objectives.

Table 1. Moose population and objectives in Unit 13, regulatory years 2008 through 2011

Subunit	13A	13B	13C	13D	13E	Total
	3500-	5300-	2600-	1200-	5000-	17600-
Objective	4200	6300	3500	1900	6000	21900
2008	2,500	4,450	1,570	1,940	5,160	15,620
2009	3,530	4,630	1,610	1,900	4,940	16,610
2010	3,490	5,280	1,700	2,280	5,430	18,180
2011	3,890	5,340	1,950	1,950	5,780	18,910

Table 2. Moose harvests and objectives in Unit 13, regulatory years 2008 through 2011

	13A	13B	13C	13D	13E	Total ^a
Objective	210-420	310-620	155-350	75–190	300-600	1050-2180
2008	238	188	61	65	169	735
2009	268	243	105	80	164	862
2010	289	304	101	66	170	938
2011	292	266	113	83	180	943

^a Total includes moose harvests that could not be assigned to a subunit based on the reported location of kill.

PROPOSAL 82

EFFECT OF THE PROPOSAL: This proposal amends the existing Unit 13 wolf control implementation plan in several ways, though there is some ambiguity in what is being requested. The minimum number of wolves to remain in the area at the end of the season would be limited to the open/active Intensive Management (IM) area instead of the entire unit. Also suggested is a wolf management strategy that controls the population closer to the mid-point of the population range. There is also a suggestion that wolves could be managed in the IM area based on the wolf/moose ratio.

DEPARTMENT RECOMMENDATION: Do Not Adopt

RATIONALE: The Department does not recommend adopting this proposal because it could compromise the effectiveness of the Unit 13 wolf control program. Based on a conversation with the proposal author, the "mid-point" referenced would be the mid-point between the spring and fall wolf estimates. If the proposal is adopted, the spring wolf objective in Unit 13 would increase from 140–160 wolves to 220–260. The average spring wolf population estimate during the 1990s was 234 (range = 180–300). During this period the number of moose observed during annual trend counts declined by approximately 26%. Following the implementation of wolf control, wolf numbers were reduced and the moose population has steadily increased. Same Day Airborne (SDA) take began in January of 2004. The spring wolf estimate has averaged 150 since spring 2006.

PROPOSAL 83

EFFECT OF THE PROPOSAL: This proposal modifies the Unit13 wolf control program by reducing the minimum wolf population objective from 135 to 100 and limiting the new objective to the active wolf control area (15,413mi²) instead of the entire unit (23,366mi²). This would effectively increase the number of wolves remaining in the active wolf control area. The proposal also changes other criteria for suspending wolf control activities. The proposal would replace the wording when "prey population and harvest objectives are reliably attained" with "when prey population meets or exceeds the midpoint of population objectives by subunit". The proposal also adds new criteria allowing IM activities to be commenced by subunit when prey populations fall below the minimum objective. Finally, the proposal would remove criteria that wolf hunting and trapping seasons could be closed annually to maintain a minimum wolf population.

DEPARTMENT RECOMMENDATION: <u>Adopt – Proposed operational guidelines</u> <u>Do Not Adopt – Proposed regulations</u>

RATIONALE: The current Unit 13 Intensive Management (IM) regulation closely resembles the plan originally laid out 10 years ago. This proposal further defines the criteria for when the wolf population should be reduced and when the wolf population is allowed to grow under the IM program. The department does not support changing the wolf population objective, removing moose harvest objectives from the criteria for suspending wolf control, or removing the requirement to close hunting and trapping when the wolf population is below the minimum

objective. However the Department would like guidance on when to suspend the wolf control program.

Under the current IM regulation, the Department has the flexibility to initiate or suspend wolf control activities once objectives have been "reliably attained". This proposal provides a point of discussion for the general public, Advisory Committees, and Board of Game. The Department is requesting guidance from the Board to refine the operational plan for this IM program.

The guidance outlined in this proposal would clarify triggers for initiating and halting wolf control within the various subunits. The proposed strategy outlines an operation guideline that would suspend wolf regulation when the moose population reaches the midpoint of objectives and resuming wolf regulation when the moose population reaches the lower objective. Other options include: using the upper objective as the trigger to suspend; or never suspending wolf regulation unless the moose population can no longer be held at the upper objective through harvest alone..

The proposal focuses solely on population objectives as triggers for suspension of wolf regulation. While that strategy seems intuitively reasonable, it does not incorporate the best biological strategy, nor does it reflect the goal that Intensive Management is implemented to provide high levels of consumptive use (as opposed to high population levels).

The optimum biological scenario is a moose population that is managed to provide harvests at the higher end of the harvest objectives while maintaining the population towards the lower end of the population objectives. Given that the desired harvest is being obtained, this scenario is optimum because it minimizes food competition for moose at the smaller population size, which in turn leads to larger offspring being produced, earlier and higher rates of reproduction, better overall body condition and nutritional status, and improved resistance to poor weather and disease. The optimum scenario of getting the desired harvest from a smaller population also reduces risk of the population growing beyond objectives and reducing the capability of the habitat through high levels of browsing and grazing.

The department recognizes that the optimum scenario is not always achievable and higher population levels may be necessary to attain harvest objectives. However, the triggers to suspend wolf regulation should not preclude the optimum scenario by forcing higher population levels even when harvest objectives are being met. The department therefore recommends using a specific harvest level (mid-point or upper) for the trigger to suspend wolf regulation whenever the population is above the lower population objective. The department does not support removing the harvest objective from the criteria to suspend wolf regulation.

Resuming wolf reduction following suspension can be accomplished quickly in the Unit 13 predator control area due to favorable conditions for same-day airborne (SDA) take and experienced and effective local participants. Because of this, the department does not believe that short or longer term suspensions of wolf regulation will result in long recovery periods due to increased effects of predation. In addition, allowing periodic increases in wolf numbers may help maintain interest and expertise in both trapping and same-day-airborne take of wolves because maintaining low numbers for very long periods may have higher economic costs than periodic

reductions due to efficiency in harvest.

The department requests that the current objectives for wolf numbers be retained with no change to the area it pertains to. The current IM plan specifies that no fewer than 140 wolves (135 was referenced in the proposal) remain in the Unit at the end of the IM season. Documenting a minimum number of wolves within a small area is very difficult due to wolf movements and non-human caused mortality. The current wolf harvest objectives ensure our ability to quantify and demonstrate that wolves are being managed on a sustainable basis.

PROPOSAL 84

EFFECT OF THE PROPOSAL: This proposal first requests establishment of a positive finding for high levels of consumptive use under regulations for implementing Intensive Management for the Mentasta Caribou Herd in Unit 11 and 12. The proposal then requests establishing population and harvest objectives and design and implementation of a wolf and bear control program on private Ahtna-Inc. lands in Unit 11 from Suslositna Creek south to Sanford River.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Board must consider a variety of criteria (5 AAC 92.106) when identifying big game populations that are important for high levels of consumptive use. The criteria include the size of historical harvests, access to harvest, relative use of the population for food, and level of hunter effort.

In 1998, the Board made a negative finding for Mentasta caribou during the initial designation of caribou herds important for high levels of consumptive use (5 AAC 92.108). The high proportion of private and federal lands, and the low harvests were cited as reasons for the negative finding. At that time, the herd had been closed to all hunting for 6 years due to a population decline and harvests had not exceeded 100 caribou in the previous 10 years. Harvests meeting or exceeding 100 caribou are one of the criteria the board must consider when making a finding. Prior to 1989, harvests of over 200 caribou had been reported.

This proposal and Proposal 85 (for moose) request implementation of intensive management on a mosaic of private lands within and adjacent to the boundaries of Wrangell St Elias National Park and Preserve. The feasibility of increasing harvests through predator reductions under such conditions is largely unexplored.

If the board wishes to pursue these programs, the Department recommends that a Feasibility Assessment be completed prior to the Board's review of the negative finding under 5AAC 92.108. The assessment will help inform the Board's review of IM status as well as a potential IM program. Neither a positive finding for high levels of consumptive use nor a feasibility assessment is necessarily required under regulation to implement predator control. However, the Department believes that a Feasibility Assessment is the best first step should the board wish to pursue IM in Unit 11.

The Mentasta Caribou Herd ranges from the western edge of Mt. Drum north through the Upper

Copper River, the Tetlin Refuge and into the Fortymile region. The calving and summer range is mostly within the boundary of the Wrangell St. Elias National Park and Preserve. Access is limited in much of the herd's range, and the majority of the land falls within Wrangell St. Elias National Park and Preserve.

This has historically been a relatively small herd numbering 2,000–3,000 through the 1970s and 1980s. The herd declined significantly between 1990 and 1997, and is now believed to number roughly 300 caribou. The last hunting season for the Mentasta Caribou Herd was held in regulatory year 1991.

Unlike large adjacent caribou herds such as the Nelchina and Fortymile herds, the Mentasta Caribou Herd exhibits dispersed calving, a common predator avoidance scenario. Kurt J. Jenkins and N.L. Barten (2005) published a study identifying factors limiting the herd. They confirmed predation-related mortality as the proximate cause of the decline. Wolves and bears were the primary predators. The Mentasta Caribou Herd is monitored annually by the Wrangell St. Elias National Park and Preserve staff.

PROPOSAL 85

EFFECT OF THE PROPOSAL: This proposal requests establishment of a positive finding for high levels of consumptive use for moose in Unit 11, and establishment of a wolf and bear control program on private Ahtna-Inc. lands in Unit 11 from Boulder Creek south to Sanford River, and Mineral Springs to Kuskulana River.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See the rationale for Proposal 84 which is a companion request for predator control for caribou in Unit 11.

The harvest of moose in Unit 11 by general season state hunters averaged 47 moose per year (regulatory years 2000–2011). Of those, 16 moose per year were harvested by resident hunters. For the same period, an additional 22 moose per year were harvested by resident hunters under federal subsistence permits. During regulatory years 2010 and 2011, resident general season hunters harvested 7 and 15 bulls respectively. Federal subsistence hunters harvested additional 19 and 26 bulls respectively.

Moose numbers in Unit 11 are not monitored as closely as in adjacent Unit 13. Between the small trend count areas that are flown every couple years in the northwestern portion of the unit, and triennial moose geospatial sampling surveys by the Central Alaska Network, it is evident Unit 11 has a long history of low density moose numbers since 1970 (range 0.1–0.9 moose per mi²). Access is limited to much of the unit, and the majority of the land falls within the boundaries of Wrangell St. Elias National Park and Preserve.

PROPOSAL 86

EFFECT OF THE PROPOSAL: This proposal would close state and private lands in subunit 13E

north and west of the Parks Highway to the boundary of Denali National Park, and the area 5 miles south and east of the highway to the taking of wolves.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: Closing a portion of subunit 13E to the taking of wolves would allocate use of the wolf population in the area by not allowing consumptive uses. The proposed closure would affect a small portion of Unit 13 where a limited number of wolves have been harvested historically, and there are no biological concerns associated with the wolf harvests in this area. No wolves were sealed from this area in regulatory year 2011. The Board recently removed a similar closure bordering Denali National Park and Preserve lands in Unit 20 and instituted a moratorium on similar wolf harvest closures in that Unit.

PROPOSAL 87

EFFECT OF THE PROPOSAL: This proposal requests to allow the use of off-road vehicles by elderly and disabled hunters in state parks in Unit 13.

DEPARTMENT RECOMMENDATION: Take no Action

RATIONALE: The heading on this proposal indicates a reference to controlled use areas, although the wording of the proposal refers specifically to state parks. There is only one state park in Unit13, Denali State Park in subunit 13E. The off-road vehicle restriction referred to in this proposal is a regulation of the Alaska Department of Natural Resources Division of State Parks and cannot be changed by the Board of Game.

PROPOSAL 88

EFFECT OF THE PROPOSAL: This proposal asks to delay the opening of ptarmigan season in subunit 13B by 10 days and extend the season by 4 months, changing the season dates from August10 – November 30 to August 20 – March 31. The proposal also asks to lower the bag limit from 10 per day and 20 in possession, to 5 per day and 10 in possession.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: Springtime, territorial rock and willow ptarmigan surveys were created and first implemented in Unit13 in 1997. Peak willow and rock ptarmigan densities were observed in 1999, with 10–13 rock ptarmigan males/mi² in 3 survey locations in the spring. Numbers of both species declined sharply over the next several years. Beginning during the 2005 regulatory year the Board of Game (BOG) reduced the late season (December 1 –March 31) ptarmigan bag limit for subunits 13A, 13B, and 13E to 5 per day and 10 in possession.

During the spring of 2008, zero male rock ptarmigan were observed along 3 survey locations in 13B. Male willow ptarmigan were also at low density (3–5/mi²) in 13B. Primarily as a result of rock ptarmigan densities and concern regarding winter harvest effects, department staff recommended further regulation changes during the spring 2009 BOG meeting. The

conventional season-long bag limit of 10 per day and 20 in possession was restored for subunits 13A and 13E. For subunit 13B, the late winter season was eliminated. The opposing regulations in adjacent subunits were designed specifically to enhance our ability to detect change in ptarmigan numbers due to the restricted regulations.

Although easily accessible rock ptarmigan habitat is much less abundant and that species is not surveyed in subunit 13E, willow ptarmigan remain a means of comparison between the 2 subunits. In 2012, after 3 complete seasons of wintertime closures in 13B, densities in 13B increased (3 to 10 males/mi2) whereas in 13E densities remained very low (1 to 3 males/mi²). The increase in willow ptarmigan densities in subunit 13B from 2009 to 2012 could be explained by factors other than lack of wintertime hunting, including natural population cycle, predation, human recreational activities, and weather patterns during brood rearing. However, those same factors should have also affected populations in adjacent subunit 13E (see Figure).

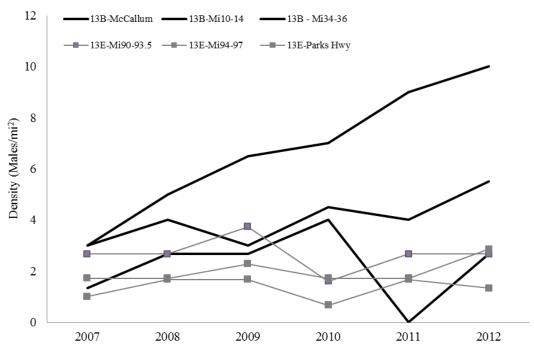


Figure. Territorial male willow ptarmigan densities in the same three survey locations monitored for rock ptarmigan in subunit 13B (three heavy black lines) and three in subunit 13E (three lighter grey lines), 2007–2012.

It has become well documented that winter harvest on grouse and ptarmigan is additive to natural mortality, particularly during late winter (late February through April). Adult male rock and willow ptarmigan often overwinter near or adjacent to springtime breeding territories and begin exhibiting territorial breeding behavior by early to mid-March. This very conspicuous behavior increases their exposure to human harvest during the breeding season. Subunit 13B is currently the only location in the state where we have begun to examine the effects of no wintertime hunting.

In Alaska, much of the ptarmigan harvest occurs from late-February through March. During this time of year, snow conditions are favorable for operating snow machines and day length and

daytime temperatures are increasing. Winter recreational vehicle technology has changed significantly over the past 20 years allowing access to previously inaccessible areas. It has also grown in popularity among Alaskans particularly within Unit 13. Many Alaskans are looking for hunting opportunities during this enjoyable time of year. It is also an "introduction hunt" in that many families participate, many of whom may not have hunted before. However, it is also when ptarmigan are among their most vulnerable.

Based on a small game hunter survey in spring 2012, Unit 13 is the third most popular Unit statewide in which hunters pursue ptarmigan. However, the harvest per unit of effort is 13th highest statewide and is considerably less than the Units with the highest harvest rates. In other words a considerable amount of effort is expended hunting ptarmigan in Unit 13 with hunters generally reporting poor success.

Based on continued low rock ptarmigan abundance, late winter additive hunting mortality, poor hunter success, and the fact that ptarmigan species cannot be regulated separately the department is currently reluctant to support extending the season from November 30 to March 31. The department would like to continue to monitor the effects of no late season hunting in subunit 13B for 2 additional, complete hunting seasons (RY12 and RY13) to determine if rock ptarmigan numbers can rebound. The department would plan to increase research effort on the subunit 13B rock ptarmigan population that would specifically address abundance monitoring and movement patterns. We fully recognize the sacrifice hunters are making in this area, particularly in spite of increasing willow ptarmigan abundance.

PROPOSAL 89

EFFECT OF THE PROPOSAL: This proposal requests a muzzleloader and archery Dall's sheep hunt in subunit 13A (eastern Talkeetna mountains) that would replace the current general season hunt. The proposal also suggests a secondary option to create a drawing hunt in a small area south of the Little Nelchina River.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The department does not have a recommendation on the allocation of sheep hunting opportunity that would result from this proposal. This portion of the Talkeetna Mountains has been managed for maximum sheep hunting opportunity under a full curl general season for a number of years. Resident sheep hunters continue to dominate this hunt area (88% of all hunters and 60% of all harvest; regulatory years 2002 through 2011), and there are no current conservation concerns for the area.

The deep snow during 2011-12 may have reduced sheep numbers based on previous trends that accompanied similar winters in this area. No surveys were conducted in 2012, although Talkeetna Mountain surveys are planned for 2013.

PROPOSAL 90

EFFECT OF THE PROPOSAL: This proposal modifies sheep hunting regulations in the subunit

13D portion of the Chugach Mountains. The resident drawing hunts (DS160 and DS165) would be replaced with a general season hunt for residents with a bag limit of 1 ram with horns that are full curl or greater. Nonresident permit numbers would be fixed to current levels (10 permits in DS265 and 2 permits in DS260), and their bag limit would remain 1 ram with horns that are full curl or greater.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department does not have a recommendation on this proposal because it allocates sheep hunting opportunity between residents and nonresidents. No biological concerns have been identified for this proposal, and the pros and cons of adopting these regulatory changes are associated with social values including hunt quality, hunting opportunity, and trophy value.

The Board adopted the current regulations in 2007 following a decline in sheep numbers and continued high hunting pressure. The regulatory changes included the establishment of a drawing hunt system, the liberalization of bag limits in some areas to include any-ram hunts, and the allocation of harvest opportunity between residents and nonresidents. The Board allocated 20% of the permits available to nonresidents and 80% for residents.

If this proposal is adopted, participation by residents would no longer be limited while non-resident participation would remain at current levels. The proposal states that the change is needed to alleviate crowding by resident hunters in other general hunts around the state. Participation in general hunts is affected by a variety of factors such as access, success rates, status of game populations, as well as alternative hunting opportunities. It is unknown whether a return to a resident general season in 13D will alleviate crowding in other areas.

The drawing hunts (DS160 and DS165 in TAZWEST and DS260, and DS265 in TAZEAST)(see Figure) were created to reduce hunting pressure by residents and nonresidents in subunit 13D and reduce resident hunting competition with nonresidents through permit allocation. The changes reduced the amount of hunting competition in general (Tables 1 and 2). If the resident drawing hunts are eliminated, the total nonresident hunt opportunity will remain constant at current levels regardless of availability of rams. Resident participation will likely increase to previous levels and success rates will decline.

In addition, the proposal would eliminate the any ram hunts. The primary benefit of the "any ram" limit is that hunters are be able to take rams that are not full-curl or cannot be clearly identified by the hunter as full-curl. This type of strategy is commonly used in Bighorn sheep management in Nevada, Wyoming, and Colorado. The Department believes the strategy can be used to manage sheep in Alaska if it is desired.

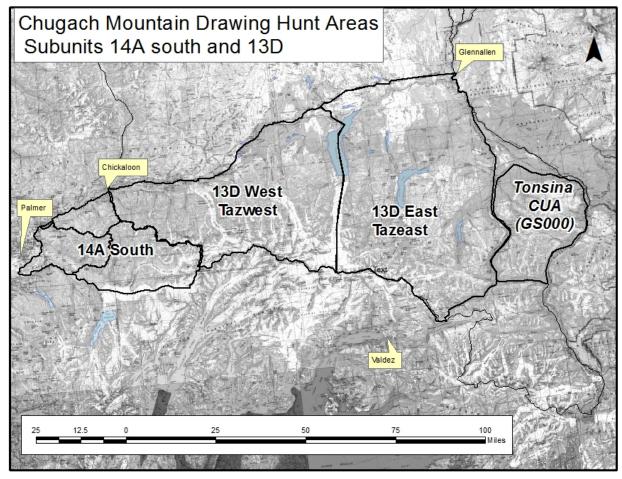


Figure. Map Chugach Mountains divided into sheep management areas: subunit 14A south, subunit 13D west of the Tazlina glacier (Tazwest), subunit 13D east of the Tazlina glacier to the Richardson Highway (Tazeast), and subunit 13D east of the Richardson Highway (Tonsina Controlled Use Area (CUA)).

Table 1. Sheep hunting opportunity and harvests in TAZWEST (DS160 resident, DS260 nonresident), regulatory years 2002–2012

Year	Permits	Hunters	Harvest	% Succ. Res.	% Succ. Nonres.	Ave. Horn	Ave. Age	38"+	40"+
2002	GS000	61	12	11%	44%	35.2	8.4	1 (8%)	0
2003	GS000	52	22	21%	83%	37.1	8.7	8 (36%)	3 (14%)
2004	GS000	62	29	29%	89%	36.6	8.4	8 (28%)	2 (7%)
2005	GS000	50	21	19%	88%	37.2	9.0	7 (33%)	3 (14%)
2006	GS000	43	10	7%	57%	35.5	8.8	0	0
2007	GS000	47	13	9%	77%	35.2	9.3	2 (15%)	1 (8%)
2008	8 R, 2 NR	6	3	40%	25%	32.5	3.0	0	0
2009	8 R, 2 NR	6	2	40%	25%	35.1	7.0	1 (50%)	0
2010	8 R, 2 NR	6	3	25%	40%	38.0	8.0	1 (33%)	1 (33%)
2011	8 R, 2 NR	9	4	33%	67%	37.8	8.8	1 (25%)	1 (25%)
2012	10 R, 2 NR	11	8	67%	100%	36.3	8.3	5 (63%)	2 (25%)

Table 2. Sheep hunting opportunity and harvests in TAZEAST (DS165 resident, DS265 nonresident), regulatory years 2002–2012

Year	Permits	Hunters	Harvest	% Succ. % Succ.		Ave.	Ave.	38"+	40"+
i ear	Permits			Res. ¹	Nonres. ²	Horn	Age	30 +	40 +
2002	GS000	82	33	30%	65%	34.7	8.1	6 (18%)	1 (3%)
2003	GS000	96	42	27%	89%	36.4	8.9	13 (31%)	3 (7%)
2004	GS000	100	36	22%	70%	36.4	8.4	12 (33%)	5 (14%)
2005	GS000	87	25	19%	60%	37.7	8.5	12 (48%)	3 (12%)
2006	GS000	60	16	19%	44%	37.5	8.7	7 (44%)	3 (19%)
2007	GS000	96	18	9%	60%	36.7	9.0	10 (56%)	2 (11%)
2008	33 R, 8 NR	23	3	5%	40%	38.5	8.3	2 (67%)	0
2009	33 R, 8 NR	22	10	29%	75%	37.6	7.6	4 (40%)	1 (10%)
2010	33 R, 8 NR	26	13	41%	100%	38.3	7.8	7 (54%)	2 (15%)
2011	33 R, 8 NR	32	19	46%	100%	38.9	8.6	13 (68%)	4 (21%)
2012	40 R, 10 NR	37	11	14%	88%	39	8.8	7 (64%)	5 (45%)

PROPOSAL 91

EFFECT OF THE PROPOSAL: This proposal eliminates the resident drawing hunts in central subunit 13D and 14A south in the Chugach Mountains and replaces them with general season hunts with a bag limit of 1 ram with horns full curl or greater. The proposal also requests that the nonresident drawing hunts be retained, with a bag limit of 1 ram with horns full curl or greater. Nonresident permits would be reduced to 5 (no reference was provided as to the location of the 5 permits).

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: As with proposal 90, the Department does not have a recommendation on this proposal because it allocates sheep hunting opportunity between residents and nonresidents. No biological concerns have been identified for this proposal, and the pros and cons of adopting these regulatory changes are associated with social values including hunt quality, hunting opportunity, and trophy value. The proposal is similar to proposal 90 but also includes the drawing hunts in subunit 14A. The proposal does not specify how the non-resident hunts would be administered or whether the harvest or the number of permits should be limited to 5. While there may be other options, a drawing hunt is likely the most appropriate way to achieve the proposal's intent to reduce non-resident participation.

In southern subunit 14A, current regulations allocate 10% of the permits to nonresidents, with the remaining 90% issued to residents. If this proposal were adopted, the allocation of permits to non-residents would be decreased and remain constant regardless of availability of rams.

The proposal states that the changes are also necessary to increase resident opportunity and to reduce discontent between residents, non-residents, and guides. The proposal would increase resident participation and reduce success rates. It would also eliminate the any ram drawing hunts. Background on the "any ram" drawing hunts and the subunit 13D sheep population can be found in the Department's rationale for Proposal 90.

The sheep population in subunit 14A portion of the Chugach Mountains was estimated to include approximately 800 sheep in 2010, but the effects of the severe winter of 2011–2012 are still unknown. The number of rams observed during surveys has increased from a low of 145 in 2007 to 173 in 2012 and the ram:ewe ratio increased from 33 rams:100 ewes in 2007 to 53 in 2012.

Hunter harvests have decreased from 25 rams (RY05–RY07) to an averaged 9 rams during RY08–RY09 following the implementation of the "any ram draw hunt". The reduced harvest is a direct result of limiting the number of hunters that could participate in the hunt under the new draw permit system during RY08 and RY09. The horn size of sheep harvested also decreased from an average of 36.2 inches during RY04 –RY06 to an average of 29.7 inches during RY08–RY10 and increased to 33.9" during RY11–RY12. Hunter success increased from 20% to 40% when the drawing permit hunt was implemented. Prior to the establishment of the draw, resident hunters took 35% of the sheep harvest (RY05–RY07). More recently resident hunters have taken 89% of the harvests (RY08–RY09).

The number of drawing permits issued will be increased 50% in RY13 to provide more sheep hunting opportunity in subunit 14A.

PROPOSAL 92

EFFECT OF THE PROPOSAL: This proposal changes the bag limit for sheep in western subunit 13D and 14A south from any ram to 1 ram with horns full curl or greater.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale provided for Proposal 90 and 91. This proposal differs from proposals 90 and 91 in that it retains the resident drawing hunts and retains the current allocations to residents and non-residents. The proposal seeks to eliminate the "any ram" hunts and return to 1 ram with horns full curl or greater to increase the number of permits that can be issued. The proposed change would likely increase the number of permits that can be issued, the upper limit of which would be determined by the Board's consideration of social issues including hunt quality, hunting opportunity, and trophy value .

The proposal states that the "any ram" hunts lead to the harvest of some younger rams that have not had a chance to breed and allows some old, large rams to die without being harvested. The "any ram" hunts do allow the harvest of some younger rams but also allow more large rams to breed before being harvested or dying of other causes. The Department recognizes these trade-offs but is unable to quantify the effects of this strategy on trophy quality, harvest rates, and hunter approval with the limited data from the hunts to date. The "any ram" strategy is being used in Bighorn sheep management in some states. The Department believes the strategy can be used to manage sheep in Alaska if it is desired.

PROPOSAL 93

EFFECT OF THE PROPOSAL: Reauthorize antlerless moose hunt for unit 14A.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department proposal – see issue statement.

PROPOSAL 94

EFFECT OF THE PROPOSAL: Shorten the August 25 – September 25 moose season 5 days by closing September 20 and remove the spike-fork component of the bull harvest in subunit 14A.

DEPARTMENT RECOMMENDATION: Take No Action

RATIONALE: The Department would like to withdraw support for this proposal based on the results of a composition survey of moose in subunit 14A that was conducted in November 2012.

During the fall of 2011, the Department surveyed the moose population in subunit 14A and estimated the population to be approximately 8,000 moose (above the population objective of 6,000–6,500 moose), but the bull:cow ratio was only 18 bulls:100 cows (below the management objective of 20–25 bulls:100 cows). Additionally there was concern that the deep-snow winter of 2011–2012 would adversely affect moose survival, particularly for bulls and calves, and that differences in survival might reduce the bull:cow ratio even further. The Department submitted this proposal as a placeholder that would allow the Board to modify moose hunting seasons and/or bag limits in subunit 14A as necessary to keep the moose population within management objectives.

During the fall of 2012, the Department conducted a fall composition survey, and estimated the bull:cow ratio to be 26 bulls:100 cows (above the management objective). The difference between the estimates in 2011 and 2012 can be partially explained by differences in the survey techniques used to estimate the moose composition (GSPE in 2011 vs. Random Composition Survey in 2012), but it can also be attributed to better moose survival during the winter of 2011–2012 than had previously been anticipated.

PROPOSAL 95

EFFECT OF THE PROPOSAL: Require lower jaw and antlers of bull moose harvested in subunit 14A to be brought in to an ADF&G office for aging and measuring.

DEPARTMENT RECOMMENDATION: Do Not Adopt

RATIONALE: This proposal would increase the burden of compliance for successful moose hunters in subunit 14A. Based on bull harvests from 2007–2010 an average of 478 hunters annually would have had to comply with this requirement had the proposed the requirement been in place during that period. Even though the amount of information collected from successful

hunters would be increased and the quality of the reported harvest information likely improved, the Department does not think that the information collected would greatly enhance our ability to manage moose harvests in this area as much of the information is already provided in harvest reports.

In the issue statement, the proposal author also stated "some also feel a significant portion of bull moose from this area may never grow legal antlers under the spike/fork/50 inch/3 brow tine antler restricted harvest in this area". Adopting the proposed specimen requirements will not answer this question as only harvested moose will be measured. Information about bulls that do not meet the legal description or whether or not they were legal for harvest at some point in time under the 50 inch/3+ brow tine regulation will not be collected through the specimen requirement.

PROPOSAL 96

EFFECT OF THE PROPOSAL: Establishes a winter antlerless hot-spot hunt in subunit 14B, permits the use of archery equipment for hot spot hunts, and reauthorizes the subunit 14A hot-spot hunt.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department proposal – see issue statement.

The hot-spot registration hunt in subunit 14A has proven to be an effective tool to address public safety concerns related to moose-vehicle collisions and nuisance management issues. During the first year of this hunt (regulatory year 2011), and the Department issued 50 permits to evaluate the utility of this hunt and to gauge public sentiment for this program. Hunters took 44 moose that were associated with a variety of nuisance issues (moose in high moose-vehicle collision areas, moose eating livestock feed, and moose engaged in aggressive behavior), and the public generally approved of the outcome of these hunts.

Some problem moose occurred in areas that have local ordinances prohibiting the discharge of firearms, and the Department did not issue permits to have these animals removed. This proposal would authorize the use of archery equipment as an additional tool to take moose in areas with firearms restrictions. Different areas have different restrictions on weapons use. The city of Palmer does not allow the use of firearms or archery equipment within the city limits. The city of Wasilla does not allow the use of firearms within city limits, however archery equipment would be allowed.

PROPOSAL 97

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose hunt on Kalgin Island in subunit 16B.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department proposal – see issue statement.

PROPOSAL 98

EFFECT OF THE PROPOSAL: Modify moose hunting season dates in subunit 16A for residents and nonresidents by eliminating all opportunity to hunt moose in August. The new fall season would run from September 1 – September 30 (closing 5 days later than the current season) and a new winter season would be created for residents that would be open from December 9 – December 15 with a spike/fork bag limit.

DEPARTMENT RECOMMENDATION:

No Recommendation – Eliminate the August seasons and establish a December season Do Not Adopt – Extend fall season to September 30

RATIONALE: The Department does not have a recommendation on the allocations proposed, but is concerned that the harvests may become excessive if the fall season is extended to September 30. This proposal allocates opportunity between hunters, some of whom would prefer to hunt during the archery-only season that is eliminated by this proposal, and between hunters who have a preference for hunting moose during the months of August or December.

A GSPE survey in 2009 estimated the moose population in subunit 16A to include 2,600 moose (below the population object of 3,500 to 4,000 moose) with 26 bulls:100 cows and 29 calves:100 cows. There were approximately 426 bulls in the population, of which approximately 10% had either spike or fork antlers. While the bull:cow ratio was above management objectives (20-25 bulls:100 cows), bull harvests must be regulated to maintain a population of 330-413 bulls to keep the bull:cow ratio within the objectives. Bull harvests have averaged 122 bulls during the past 10 years.

Since regulatory year 2006 (RY06), August moose harvests have averaged 13 bulls. During RY99 and RY00 a December spike-fork season (December 1 to December 15) was offered that resulted in an average harvest of 18 bulls. Assuming the RY99 and RY00 December harvests are representative of the amount of harvest we would expect if he same hunt was offered today, closing the August moose hunting season and opening a December spike-fork season would not change the annual moose harvests significantly. As a consequence this season modification would be largely allocative.

However the proposal also changes the closing date of the fall season from September 25 to September 30. These 5-extra days to hunt moose in September could increase harvest to an unsustainable level. Bulls become more vulnerable to harvest as the rutting season approaches, and the number of hunters in the subunit may increase after hunting seasons close in adjacent areas on September 25. While it is impossible to predict how many additional moose will be harvested, the increase is expected to be significant, and the Department does not recommend this change.

PROPOSAL 99

EFFECT OF THE PROPOSAL: Align the nonresident moose season in subunit 16B with the resident season of August 20–September 25.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department does not have a recommendation on this proposal because it allocates moose hunting opportunity in subunit 16B. Under the current regulation, nonresident moose hunting opportunity is provided when there are more than 240 moose available for harvest. The Board developed this regulation after considering the amounts reasonably necessary for subsistence (ANSs) for the subunit. At 5 AAC 99.025 (a) (8), the board has made positive customary and traditional use findings for moose in three mainland areas of 16B: Redoubt Bay drainages, with an ANS of 10; that portion of the Beluga River and north of Redoubt Bay, with an ANS of 29–37; and that portion north of the Beluga River, with an ANS of 160–180.

Because subunit 16B is so large, the department has divided the area into three survey units (16B-North, 16B-Middle, and 16B-South) (see Figure). The most recent surveys conducted were in subunit 16B-South in 2010, 16B-Middle in 2011, and 16B-North in 2008. The 16B-South survey produced a population estimate of 2,372 (\pm 1,055) moose and a bull:cow ratio of 52 bulls:100 cows. The population in 16B-Middle was estimated to include 3,458 (\pm 701) moose and a bull:cow ratio of 46 bulls:100 cows. In 16B-North, the moose population was estimated to include 834 (\pm 156) moose with a bull:cow ratio of 58 bulls:100 cows. Based on these survey results, the Department believes that the harvestable surplus of bulls in subunit 16B is well above the various ANSs and the minimum required by regulation to offer a nonresident hunting season. A nonresident hunt was offered in regulatory year 2012, and 9 bulls were taken.

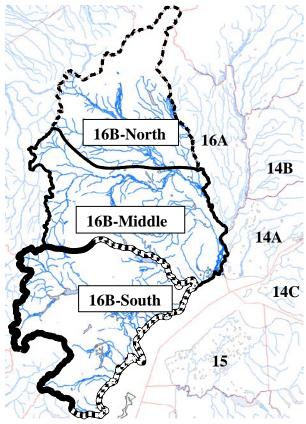


Figure. Map of Subunit 16B showing moose survey areas 16B-North, 16B-Middle, and 16B-South.

PROPOSAL 100

EFFECT OF THE PROPOSAL: Close nonresident moose hunting in the predator control area in Unit 16.

DEPARTMENT RECOMMENDATION: Take No Action

RATIONALE: Take no action based on actions taken on Proposal 99.

PROPOSAL 101

EFFECT OF THE PROPOSAL: Prohibit hunting with off-road vehicles (ORVs) in subunit 16B until 3:00 am following the day riding.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Department does not have a recommendation on this proposal because it allocates moose hunting opportunity based on transportation methods. No biological concerns have been identified that are influenced by the use of ORVs by hunters. On average, very few moose (2%) are actually harvested by hunters that use ORV's in subunit 16B.

PROPOSAL 102

EFFECT OF THE PROPOSAL: Establish a draw hunt for caribou in subunit 14A and add a winter season that can be offered if harvest opportunity exists.

DEPARTMENT RECOMMENDATION: Amend & Adopt

RATIONALE: Department proposal – see issue statement.

Department staff deployed radio collars on 22 caribou in subunits 14B and 14A of the western Talkeetna Mountains and has been monitoring their movements periodically. A sex-and-age composition survey of caribou in the Talkeetna Mountains was also conducted during the fall of 2012. The results of this survey yielded a composition of 42 bulls: 100 cows indicating there is room for additional harvest.

The department recommends amending the proposal by changing the proposed bag limit to 1 caribou, instead of 1 bull caribou. If future harvest patterns or caribou surveys indicate that cow harvests are no longer sustainable, the Department will use its discretionary authority on permit hunts to change the bag limit to bulls-only. A summary of recent hunting opportunity and harvests can be found in the table below.

Table. Caribou harvest in the Talkeetna Mountains in subunit 14B, DC 590, regulatory years 2002 through 2012

Regulatory Year	Permits Issued	Number Hunted	Bull Harvest	Cow Harvest	Total Harvest ^a
2002	60	26	5	3	8
2003	60	17	4	0	4
2004	60	20	10	1	11
2005	100	28	6	1	8
2006	100	29	10	3	13
2007	106	38	19	4	23
2008	100	38	12	6	18
2009	100	38	20	4	24
2010	100	45	21	8	29
2011	100	54	35	5	40
2012	100	43	26	7	33

^a Total harvest includes caribou harvest by hunters who did not report the sex of the animal harvested

PROPOSAL 103

EFFECT OF THE PROPOSAL: Review and modify the Unit 16 intensive management program

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: The moose population in the Unit 16 predation control area has grown beyond the lower population objective. Considerable additional harvest is available in some portions of the area and actions should be taken to realize the potential harvest. This proposal was submitted by the department to provide the Board with an opportunity to evaluate the Unit 16 Intensive Management program and for the Board to provide guidance on operational details regarding suspension of wolf regulation, continuation of bear reduction efforts, and expansion of hunting opportunity to achieve harvest objectives. In addition, the Department offers several amendments to the 92.125(d) regulation in the proposal that we recommend adopting to clarify or improve the existing program.

Moose

The moose population objective for subunit 16B is 6,500–7,500 moose. In 2010 the moose population estimate based on a composite of surveys conducted from 2008–2010 was 5,600 moose and 6,700 moose in 2011 based on surveys conducted in 2008–2011 (Table 1). Overall, current estimates indicate the moose population is above the low end of the objective (Table 2). Nutritional indices (rump fat measurements, body condition scores, twinning rates, and pregnancy rates) observed during research studies and surveys indicate that the moose population in subunit 16B is not limited by habitat at this time.

Because subunit 16B is so large, the department has divided the area into three survey units (16B-North, 16B-Middle, and 16B-South) (Figure 1). If the moose population objective is subdivided based on the amount of land each of the survey units contain, the moose population objectives in 16B-Middle and 16B-South are being met or exceeded. However in 16B-North, the population would have less than 50% of the objective. Bull:cow ratios continue be over the 20–25 bulls:100 cow ratio objective in all areas, including 16B-North.

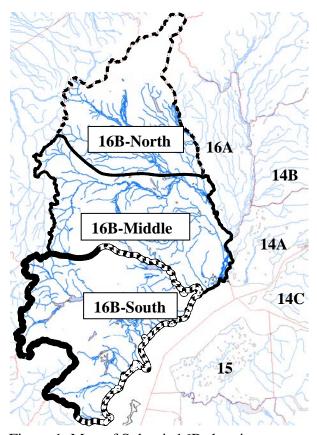


Figure 1. Map of Subunit 16B showing moose survey areas 16B-North, 16B-Middle, and 16B-South.

Table 1. Subunit 16B moose population estimates and composition

Cymrox I Init	Year	Bull:100 Cow	Calf:100 Cow	Population	80% Confidence
Survey Unit	rear	Ratio	Ratio	Estimate	Interval
16B-North	1993	50	16	2006	1574–2438
	2003	33	16	982	798–1167
	2008	58	12	834	678–990
16B-Middle	1993	21	25	3653	1688–5618
	2008	54	21	2446	1722-3171
	2011	46	24	3458	2918–4000
16B-South	1996	25	25	1081	936–1226
	2004	23 ^a	23 ^a		
	2010	52	18	2372	1594–3151
Subunit 16B	1996			6739	
	2010			5642	4,788-6,932
	2012			6664	5,190-8,141

^a Composition Survey only

Table 2. Subunit 16B moose population estimate and objectives

Survey Unit	Population Objective per area (and midpoint)	2011 Population Estimate	Percent Recovery to Objective Midpoint
16B-North	1820–2100 (1960)	834	43%
16B-Middle	3120–3600 (3360)	3458	103%
16B-South	1560–1800 (1680)	2372	141%
Subunit 16B	6500–7500 (7000)	6664	95%

The moose harvest objective in subunit 16B is 310–600 moose annually. Although the population estimate indicates the moose population is above the lower objective and harvests have increased (Table 3), the harvest still needs to increase by just over 100 moose to reach the lower harvest objective. Based on the current bull:cow ratio and population size, the lower harvest objective could be achieved if harvest regulations are liberalized.

Table 3. Moose harvests in subunit 16B, regulatory years 2002 through 2011

Regulatory Year	# of Hunters	Resident General Season Harvest	Tier II Harvest	Nonresident General Season Harvest	Total Harvest
2002 ^a	271	0	67	0	67
2003 ^b	595	98	79	1	178
2004 ^b	564	85	79	0	164
2005 ^b	553	62	77	0	139
2006^{a}	310	4	104	0	108
2007^{a}	293	6	102	0	108
2008^{a}	253	5	115	1	121
2009^{b}	624	100	85	0	185
2010^{b}	578	97	103	0	198
2011 ^c	633	99	90	9	198

^a Tier II hunt only. No general season.

At 5 AAC 99.025 (a) (8), the board has made positive customary and traditional use findings for moose in three mainland areas of 16B: Redoubt Bay drainages, with an ANS of 10; that portion of the Beluga River and north of Redoubt Bay, with an ANS of 29–37; and that portion north of the Beluga River, with an ANS of 160–180.

Brown Bear

Brown bear harvest has been increasing in Unit 16 since the 1990's. Brown bear harvest averaged 56 bears annually from RY91–RY00 and 93 bears annually from RY01–RY09. Harvests peaked at 150 bears during the first season of predator control (RY10) and returned to

^b Tier II hunt and general season for residents only.

^c Tier II hunt and general season for residents and nonresidents.

pre-control levels in RY11 (111 bears taken in RY11 compared to an average of 102 bears taken between RY04 and RY09; range 69–117). Bear harvests in the area designated for brown bear control averaged 19 brown bears annually (29 in RY10 and 8 in RY11) and accounted for 14% of the overall harvest during RY10 and RY11 combined. To date, a total of 25 brown bears have been harvested in subunit 16B during RY12 and only 2 of these have been under a control permit.

Line-transect surveys conducted in 2007estimated the brown bear population in subunit 16B at 800 bears. Despite the increased take, brown bear harvests (RY01–RY11) have not been sufficient to substantially reduce the brown bear population.

Black Bear

Black bear harvest in subunits 16A and 16B has been increasing since the early 1990's. In subunit 16B, black bear harvest from RY91–RY11 averaged 178 bears. Harvest increased dramatically in 2006, just prior to the start of the black bear control program. Black bear harvests continued to increase throughout the subunit until RY11 when participation in black bear hunting and control decreased. For example bear baiting registrations decreased from an average of 1,016 registrations annually between RY07 – RY10 to only 694 registrations in RY11.

Line-transect Surveys conducted in 2007estimated the black bear population in Unit 16 at 3,500 bears. Based on this estimate, the average harvest of black bears in subunit 16B was not sufficient to reduce the black bear population.

Wolves

Reports from trappers, pilots, and staff indicate wolf numbers began increasing in the early 1990s and wolf harvest increased. In March 1993, staff estimated that there were 48–62 wolves in 8–10 packs in Unit 16. By the time wolf control began in December of 2004 the wolf population was estimated at 170–240 wolves in 18–22 packs.

In December 2004 a same-day airborne (SDA) land-and-shoot wolf control program was initiated to reduce wolf predation on moose and ultimately to increase the moose population and harvests to the Intensive Management objectives. This program was amended in February 2005 to include aerial shooting. The wolf population was reduced during RY04 and was regulated at a lower density through efforts that have continued until the present time.

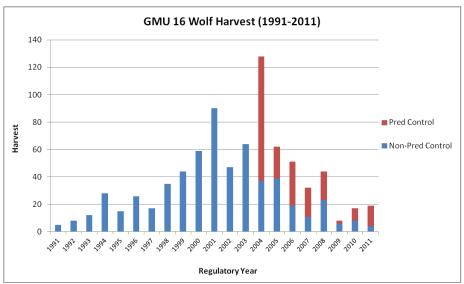


Figure 2. Wolf harvests in Unit 16, regulatory years 1991–2011

Effectiveness of the Control Program

Bear Control and Calf Moose Mortality.

The Department has monitored moose calf survival in 16B-Middle and 16B-North since 2005 by monitoring radio collared moose, but no increase in calf survival has been detected in those areas. A spatial analysis was also conducted that showed no relationship between black bear harvest density and calf survival. In other words, young calves born in areas with high bear take did not have higher survival than calves in areas with low bear harvest. Department staff concluded that the black bear reduction program was not effective in increasing calf survival in the 16B-Middle and 16B-North study area.

In 2010, Department biologists selected a second study area in 16B-South, near Tyonek, that had the highest black bear harvests in the subunit. If the black bear control program was having a positive effect on moose calf survival anywhere in the unit, it should have been detectable in this area. During the spring of 2010, moose calves were collared and monitored (n=54) to evaluate mortality rates and cause of death. Of the calves that were monitored during the project, approximately 50% died within 2 ½ weeks of birth, and by 6 months of life approximately 80% of calves had died. Nearly 74% of the known calf mortalities were attributed to bear predation, with 53% killed by brown bears and 21% by black bears. Another 15% of known calf mortalities were caused by an undetermined predator, but there was insufficient evidence to determine the species of predator involved. The remaining deaths were attributed to non-predation events such as drowning. Department staff concluded that the black bear reduction was not effective in reducing moose calf mortality and that brown bear mortality was also high in the Tyonek study area. In 2011, the Board of Game approved an experimental reduction in brown bears in the Tyonek study area by allowing snaring and baiting of brown bears under a control permit. In the spring of 2012, department staff repeated the calf mortality study in the Tyonek study area. This study was designed to replicate the 2010 study and evaluate the effectiveness of the combined black and brown bear reduction efforts. The study found that calf survival remained

low and 86% of known calf mortalities were attributed to bears with 53% killed by brown bears and 33% by black bears. A spatial analysis was also conducted that showed no relationship between bear harvest locations and calf survival within the Tyonek study area.

Concerted efforts from the public and organizations and liberalized methods and means resulted in substantial increases in take of bears initially, but effort and take have declined in recent years. At no point have staff been able to detect measurable increases in moose calf survival attributable to the efforts employed in this program.

Wolf Control and Calf Moose Mortality.

The Department continues to evaluate the contribution of wolf reduction and regulation to the observed increases in moose abundance in 16B-Middle and 16B-South. Survival rates of calves older than 4 months, female yearlings, and female adult moose have been high and commensurate with survival rates observed during wolf regulation in Unit 19 and during an earlier study in Unit 14 and 16 when wolf numbers were thought to be low.

There was little wolf-caused mortality observed in the calf mortality studies. However, that result is not uncommon and calf survival remained low. It is also unclear how much wolf-caused mortality there was on calves prior to the wolf reduction.

Moose numbers increased in adjacent subunits 14A and 16A during the same period, however, they are not very comparable units as there is low predation and high calf survival in the more urban portions of those units.

Recommendations

- Moose seasons should be liberalized in subunit 16B.An additional fall drawing hunt for "any bull" should be considered. An "any bull" hunt will serve to increase both participation and harvest.
- A winter hunt of some type should continue if harvest objectives are to be achieved and reasonable opportunity for subsistence provided.
- The wolf control program should continue until the harvest objective for the entire unit are met.
- Suspending the wolf control program in 16B-South or 16B-Middle should be considered.
 A suspension would help inform operational planning by determining the need or frequency for subsequent wolf regulation to maintain population and harvest objectives.
 It would also provide an adaptive learning opportunity to evaluate the contribution of the wolf reduction program to the observed increases in moose numbers by systematically initiating and suspending wolf control activities in these areas.
- No cow hunts should be implemented until the population reaches the upper objective or a decline in moose nutritional status is observed. If the population reaches the upper objective and the mid-point of harvest objectives is not met, cow hunts should be implemented but the population should be allowed to grow.

- If a declining trend in nutritional condition of moose (e.g. twinning rates) is observed, cow hunts should be implemented to stabilize the population until the nutritional status stabilizes.
- The bear reduction programs should be suspended. Any subsequent efforts to mitigate bear predation on moose calves should focus on Unit 16B-North. Further investigation into the lack of response to predator control in 16B-North is warranted.

PROPOSAL 104

EFFECT OF THE PROPOSAL: Prohibit the snaring of bears in Central/Southwest Region.

DEPARTMENT RECOMMENDATION: Take No Action

RATIONALE: The Unit 16 predation control area is the only Unit in Region IV where bear snaring is authorized. Snares can only be used by permitted participants in the Unit 16 intensive management program which was designed to reduce bear predation on moose. Because bear snaring is not an authorized method for taking bears outside of this control program, no further action is required on this proposal based on any action the Board takes on Proposal 103. The proposal would also prohibit snaring of bears in Unit 15 (Region II), but bear snaring is currently not allowed in this Unit.

PROPOSAL 105

EFFECT OF THE PROPOSAL: Prohibit the snaring of bears in Central/Southwest Region.

DEPARTMENT RECOMMENDATION: Take No Action

RATIONALE: Take no action based on actions taken on Proposal 104.

PROPOSAL 106

EFFECT OF THE PROPOSAL: Establish a brown bear baiting season in Unit 16 from April 15 – June 30 and from August 20 – October 31 under 5 AAC 85.020 for resident and nonresident hunters.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: Currently brown bear baiting is allowed only in the Brown Bear Predator Control Area in Unit 16B. This proposal would allow the harvest of brown bear at bear bait stations in all of Unit16. Brown bear harvest has been increasing in Unit 16 since the 1990's. Brown bear harvest averaged 56 bears annually from RY91 through RY00 and 93 bears annually from RY01 through RY09. Harvests peaked at 150 bears during the first season of predator control (RY10) and returned to pre-control levels in RY11 (111 bears taken in RY11 compared to an average of 102 bears taken between RY04 and RY09, range 69-117).

Brown bear baiting in the 16B brown bear control area is limited to residents only. If this proposal is adopted, it would open brown bear harvest at bait stations for both resident and nonresident hunters. This could increase the annual harvest of brown bears in Unit16, particularly by guided nonresidents. Although harvest may be increased, the department does not have any immediate biological concerns with an increased harvest as it is believed that the population can be managed on a sustained yield basis at higher harvest levels.

PROPOSAL 107

EFFECT OF THE PROPOSAL: Retain the current no closed season for brown bears in the remainder of subunit 16B.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: Department proposal – see issue statement.

PROPOSAL 108

EFFECT OF THE PROPOSAL: Suspend/relax the intensive management of wolves in Unit 16.

DEPARTMENT RECOMMENDATION: Take No Action

RATIONALE: Take no action based on actions taken on Proposal 103.

PROPOSAL 109

EFFECT OF THE PROPOSAL: Open all resident sheep hunting seasons 10 days earlier than all nonresident sheep hunting season in Region IV and allocate 90% of the harvests to residents. Remove guide requirements and increase tag and permit fees for nonresidents.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: The Board does not have the authority to eliminate guide requirements for nonresidents or modify hunting fees. However, the Board can allocate hunting opportunity between resident and nonresident hunters. This is an allocation issue that should be determined by the Board, therefore, the Department has no recommendation. Board policy (2007-173-BOG) indicates that allocations for specific hunts will be decided individually, based upon historical patterns of nonresident and resident permit use over the past 10 years. This proposal would pertain to sheep hunting seasons in Units 9, 11, 13, and 16 and subunits 14A and 14B.

At 5 AAC 99.025 (a) (10), the board has made a positive customary and traditional use finding for sheep in GMU 11, and found that 60–75 sheep are reasonably necessary for subsistence.

During the 2007 Board of Game meeting, the Board established allocations for the portions of subunits 13D and 14A within the Chugach Mountains based on the number of permits issued. A permit allocation has also been established for subunit 13C within the Tok Management Area (TMA). Allocations have not been established in the remainder of Region IV.

Sheep harvest in Units 9, 11, and 16, along with subunits 13A, 13E, 14A, and 14B within the Talkeetna Mountains, in subunit 13D within the Chugach Mountains (Tonsina Controlled Use Area), in subunit 13C within the Alaska Range (outside the TMA), in subunit 13B within the Alaska Range (outside the Delta Controlled Use Area), and subunit 13E within the Alaska Range are administered with general season hunts that require harvest tickets

PROPOSAL 110

EFFECT OF THE PROPOSAL: Open all resident sheep hunting seasons in Region IV on August 3, 7 days earlier than all nonresident sheep hunting seasons. If the season is split into an early and late hunt, the second nonresident hunt will be shortened and start 7 days after the second resident hunt begins.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal would modify sheep hunting seasons for resident hunters in Units 9, 11, 13, and 16 and in subunits 14A and 14B and for nonresident sheep hunts with split seasons in subunits 13C and 14A. This is an allocation issue that should be determined by the Board, therefore, the Department has no recommendation. This proposal may alleviate some conflicts between users by providing more opportunity for Alaska residents. The proposal also provides more opportunity to residents than nonresidents in Unit 11, where, at 5 AAC 99.025 (a) (10), the board has made a positive customary and traditional use finding for sheep in GMU 11, and found that 60–75 sheep are reasonably necessary for subsistence. Nonresidents presently have the same seasons and bag limits as residents. Allocation of Unit 11 sheep hunting opportunity has been addressed previously by the Board. The Board has also previously allocated sheep hunting opportunity in portions of subunits 13D and 14A within the Chugach Mountains and in subunit

13C within the Tok Management Area.

Region IV sheep hunters are predominantly residents who take a majority of the rams harvested. Sheep harvests in Units 9, 11, and 16, along with subunits 13A, 13E, 14A, and 14B within the Talkeetna Mountains, in subunit 13D within the Chugach Mountains (Tonsina Controlled Use Area), in subunit 13C within the Alaska Range (outside the TMA), in subunit 13B within the Alaska Range (outside the Delta Controlled Use Area), and subunit 13E within the Alaska Range are regulated by full-curl restrictions. The full-curl restriction should prevent over-harvest from affecting sheep populations in most areas, but there is a perception that legal rams are scarce in heavily hunted areas. Lower harvests and success rates compared to when these parameters peaked suggest that competition among hunters for legal rams has increased, but these changes are not necessarily a result of changes in the number of hunters in the field. Lower harvests and success rates can also be attributed to the implementation of progressively more restrictive bag limits (3/4 curl to 7/8 curl to full curl), permit restrictions, and changes in the sheep populations (variation in population size and recruitment).

PROPOSAL 111

EFFECT OF THE PROPOSAL: Open all resident sheep hunting seasons in Region IV on August 5 and all nonresident sheep hunting seasons on August 12, 7 days later.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale for Proposal 110.

PROPOSAL 112

EFFECT OF THE PROPOSAL: Extend all resident sheep hunting seasons in Region IV to August 5 – September 25 (10 extra days). The nonresident sheep hunting seasons would remain August 10 – September 20.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale for Proposal 110.

PROPOSAL 113

EFFECT OF THE PROPOSAL: Open all resident sheep hunting seasons in Region IV on August 5, 5 days earlier than nonresident sheep hunting seasons.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale for Proposal 110

PROPOSAL 114

EFFECT OF THE PROPOSAL: Open all resident big game hunting seasons 7 day earlier than nonresident hunting seasons for the same species in Region IV.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This is an allocation issue that should be determined by the Board, therefore, the Department has no recommendation. The proposal may alleviate some conflicts between users by providing more opportunity for Alaska residents. The proposal also provides more opportunity to residents than nonresidents where there is a positive customary and traditional (C&T) use finding and nonresidents presently have the same seasons and bag limits. However it also provides this additional opportunity where there is a negative C&T finding.

PROPOSAL 115

EFFECT OF THE PROPOSAL: Convert all sheep hunts in Region IV to drawing permits. Limit the number of nonresident sheep hunting permits issued to no more than 10% of the total permits and to take no more than 40% of the harvest for any given area.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This is an allocation issue that should be determined by the Board, therefore, the Department has no recommendation. Board policy (2007-173-BOG) indicates that allocations for specific hunts will be decided individually, based upon historical patterns of nonresident and resident permit use over the past 10 years.

There are currently 3 sheep drawing permit hunt areas in Region IV. The Board has previously established sheep hunting allocations for the Chugach Mountains in subunits 13D and 14A and for the Tok Management area in subunit 13C. Establishing an allocation for subunit 13B, Delta Controlled Use Area, will be problematic because the sheep population and hunt are shared with Region III.

Sheep harvests in Units 9, 11, and 16, along with subunits 13A, 13E, 14A, and 14B within the Talkeetna Mountains, in subunit 13D within the Chugach Mountains (Tonsina Controlled Use Area), in subunit 13C within the Alaska Range (outside the TMA), in subunit 13B within the Alaska Range (outside the Delta Controlled Use Area), and subunit 13E within the Alaska Range are administered with general season hunts that require harvest tickets. It should be noted that sheep populations in several of these areas are managed cooperatively with Region III. Allocating hunting opportunity in areas with shared quotas will be problematic. In addition, at 5 AAC 99.025 (a) (10), the board has made a positive customary and traditional use finding for sheep in GMU 11, and found that 60–75 sheep are reasonably necessary for subsistence. Subsistence hunting opportunity cannot, by law, be awarded by chance (e.g., through a drawing).

The proposal also requests an allocation of harvest. If the Board adopts the 40% harvest limit for nonresidents, a permit system will need to be established for residents and nonresidents in each of these areas, however it should be noted that even with a permit system, the harvest allocation goal will be difficult to achieve. The Department would need to issue permits to residents and nonresidents (hunting opportunity) based on prior success rates in an attempt to achieve the desired allocation. In-season management of a harvest allocation would be very difficult due to our inability to forecast hunter success rates in-season while hunters are still in the field, reporting delays, and delays in public notice of emergency closures.

PROPOSAL 116

EFFECT OF THE PROPOSAL: Limit nonresidents to a 10% allocation of all drawing permit hunts in Region IV.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This is an allocation issue that should be determined by the Board, therefore, the Department has no recommendation. Board policy (2007-173-BOG) indicates that allocations for specific hunts will be decided individually, based upon historical patterns of nonresident and resident permit use over the past 10 years. This proposal would pertain to brown bear, bison, goat, moose, and sheep. There are no drawing permit hunts for black bears, wolves, or wolverine in the region, and there is no caribou hunting opportunity for nonresidents in the region.

For brown bears, only Unit 10 has a drawing hunt, and a harvest allocation has been requested in Proposal 59, and no further action is need based on actions taken on Proposal 59.

Bison hunting in Region IV is available by drawing permit only. During the past 10 years an average of 23 permits were available annually. Nonresidents received 4% of permits. There is no limit on the allocation for nonresidents.

There are 3 goat drawing permit hunts in Region IV (1 in subunit 13D and 2 in subunit 14A) that there are currently not allocated. During the past 10 years 16% of the permits in subunit 13D have been issued to nonresidents and 16% in subunit 14A.

There are 3 sheep drawing permit hunt areas in Region IV. The Board has previously established sheep hunting allocations for portions of the Chugach Mountains in subunits 13D and 14A and for the Tok Management Area in subunit 13C. Establishing an allocation in the Delta Controlled Use Area portion of subunit 13B will be problematic since this sheep population and hunt are shared with Region III.

There are 14 moose drawing permit hunts available in Region IV. Five hunts in Unit 13 and 4 hunts in subunit 14A are allocated exclusively to residents. There are also 5 hunts in Unit 13 (one for each subunit) allocated exclusively to nonresidents, although the opportunity provided in these hunts (50" or 4 or more brow tines) is already provided to residents through the general season.

PROPOSAL 117

EFFECT OF THE PROPOSAL: Allocate 90% of permits for any drawing hunt in Region IV to residents and exclude nonresidents from any hunt with less than 10 permits.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale for Proposal 116.

PROPOSAL 118

EFFECT OF THE PROPOSAL: Develop a formula to allocate nonresident drawing permits between guided hunters (75% allocation or greater) and second degree of kindred hunters (up to a 25% allocation) in Region IV.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: See rationale for Proposal 116 for background on the allocation of nonresident hunting opportunity on drawing permit hunts in Region IV.

PROPOSAL 119

EFFECT OF THE PROPOSAL: Extend coyote hunting seasons in Region IV by establishing "no closed" seasons.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: There are no biological concerns for the coyote population or harvests that occur within Region IV. Coyote hunting seasons are currently aligned throughout Region II and Region IV, including all road accessible areas south of the Alaska Range, with the season running from August 10 – May 25. As a result, establishing a "no closed season" is not needed to reduce hunter confusion as the proposal suggests. The proposal also suggests that sheep hunters will benefit if the coyote season is extended. Coyote predation is not a significant factor affecting lamb recruitment or sheep population growth in a portion of the Chugach Mountains based on a recent study. Some coyote predation on lambs likely occurs in Region IV, but the coyote season extension will not likely change the predator/prey dynamics in these areas.

PROPOSAL 120

EFFECT OF THE PROPOSAL: Shorten the coyote hunting seasons on National Park Service lands in Region IV by closing seasons on April 30.

Current Season: August 10 – May 25

Proposed Season: August 10 – April 30

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal restricts coyote hunting opportunity on National Park Service lands in Wrangell St. Elias National Preserve in Units 11 and 13; Denali National Preserve in Unit16; Lake Clark National Preserve in Units 9, 16, and 17; Katmai National Preserve Unit 9; and Aniakchak National Preserve in Unit 9. The Department does not have any biological concerns for the coyote population or harvests in any of the affected areas. The pros and cons of the proposal are solely based on social values, such as trophy value, pelt quality, and reproductive status of the coyotes that are harvested.

Congressional recognition of the authority of the States to manage fish and wildlife on Federally administered lands, including those by the National Park Service, is very evident through legislation in ANILCA Sections 203, 1313 and 1314 and CFR part 24, Department of the Interior Fish and Wildlife Policy: State and Federal Relationships. The Statute and Policy are implemented through the Master Memorandum of Understanding between the Alaska Department of Fish and Game and the US National Park Service (MMOU). The MMOU notes that:

"The taking of fish and wildlife by hunting, fishing and trapping on certain Service lands in Alaska is authorized in accordance with applicable State and Federal law unless State regulations are found to be incompatible with documented Park or Preserve goals, objectives or management plans."

PROPOSAL 121

EFFECT OF THE PROPOSAL: Prohibit the taking of wolves from March 1 – November 1 in Region IV.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal restricts wolf hunting and trapping opportunity throughout Region IV and prohibits the taking of wolves in Intensive Management programs in the Unit 13 Predation Control Area, the Unit 16 Predation Control Area, the Southern Alaska Peninsula Predation Management Area, the Unimak Wolf Management Area, the Northern Alaska Peninsula Predation Management Area, and the Mulchatna Caribou Herd Management Area.

The Department does not have a recommendation on whether or not wolf hunting and trapping should be prohibited from March 1 to November 1. The pros and cons of the proposal are based on social values, such as perceived trophy value, pelt quality, and reproductive status of the

wolves that are harvested; none of which are known to affect population dynamics of wolves in Region IV.

However, prohibiting the take of wolves as part of Intensive Management Programs between March 1 and November 1 could compromise the effectiveness of these programs. Statutes governing the management of wildlife populations that are important for high levels of human consumptive use direct the Department and the Board to implement programs that actively reduce wolf predation on moose and caribou populations when feasible. After considering statutory requirements, public opinion, and all relevant biological information, including the sustainability of affected wildlife populations, the Board adopted regulations to enhance ungulate populations in many of the affected areas. Adopting a unilateral prohibition on the taking of wolves between March 1 and November 1 in Region IV would prevent these programs from accomplishing the established objectives.

PROPOSAL 122

EFFECT OF THE PROPOSAL: Reauthorize brown bear tag fee exemptions in Region IV.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Department proposal. See issue statement.

PROPOSAL 123

EFFECT OF THE PROPOSAL: Reauthorize the antlerless moose seasons in subunits 19D, 20A, 20B and 20D.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Staff proposal; see issue statement

PROPOSAL 124

EFFECT OF THE PROPOSAL: Reauthorize resident grizzly bear tag fee exemptions throughout Interior and Eastern Arctic Alaska.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Staff proposal; see issue statement

PROPOSAL 125

EFFECT OF THE PROPOSAL: Open a youth only hunt for Fortymile Caribou.

DEPARTMENT RECOMMENDATION: No Recommendation

RATIONALE: This proposal was deferred from the March 2012 Interior/Eastern Arctic Board

of Game meeting. It is an allocation issue that should be determined by the Board, and therefore, the Department has no recommendation.

The most recent Fortymile Caribou Herd photocensus in July 2010 indicated approximately 51,600 caribou. Models suggest the herd increased 4% annually from 2006-2010. Photocensuses attempts were unsuccessful during 2011 and 2012. Another attempt is planned for June 2013.

Harvest has been limited to approximately 2% of the herd since 2001 to allow it to grow and to potentially reoccupy its former range in Alaska and Yukon, Canada. Harvest management is guided by the *Fortymile Caribou Herd Harvest Plan 2012–2018* that was developed by the Harvest Management Coalition (HMC) and approved by the Board in March 2012. A total of 1,066 caribou were harvested from the herd in regulatory year 2011–2012. Harvest will be increased if the herd continues to grow.

Under 5 AAC 99.025 (a) (4), the Board has found that caribou in game management units (GMUs) 12, 20D, 20E, and 25C (Fortymile caribou herd) have positive customary and traditional uses. The Board has also found that 350–400 caribou are the amount reasonably necessary for subsistence (ANS).

The Board requested that Alaska members of the HMC meet and make recommendations concerning this proposal. Alaska members include Anchorage, Central, Eagle, Delta, Fairbanks, Upper Tanana/Fortymile and Matanuska Valley Fish and Game Advisory Committees (ACs) and the Federal Eastern Interior Regional Advisory Council. They met by teleconference. All ACs were invited; however, the Matanuska Valley AC representative did not participate. The Department facilitated the meeting and summarized the results below as requested by the HMC.

Prior to taking final action, the Board should determine whether the proposed regulations provide a reasonable opportunity for subsistence.

HMC Recommendations

The HMC does not recommend a youth hunt for the Fortymile caribou herd because they oppose favoring one user group over others. However, they agreed that if the Board adopts a youth hunt it should be a drawing as specified below. If a drawing is not possible because of legal constraints related to the state subsistence law, the HMC recommends a limited registration (phone-in) hunt similar to the model that the Board endorsed in March 2012 for a Fortymile winter hunt along the road system when large numbers of caribou are present.

All HMC members who participated in the teleconference agreed to the following drawing permit hunt specifications:

- 1. Bag limit: 1bull per lifetime (successful hunters may not reapply)
- 2. Reporting Period: 7 days (reporting period for current registration permit hunts is 3 days)
- 3. Total take: 20 caribou (10 for Zone 1, and 10 for Zone 3)
- 4. Number of permits: Up to 30 (15 for Zone 1 and 15 for Zone 3)

- 5. Age of hunter: 10 through 15 (not 17, as the statute states)
- 6. Education Requirements: Must successfully complete a Basic Hunter Education Course
- 7. Duration of season: 7 days

A majority of HMC members agreed to recommend that the Department use discretionary permit authority to choose a 7-day period for the hunt, starting no earlier than August 10, and ending no later than August 21. This would allow the flexibility to include at least 1 weekend in the hunt, allowing young hunters the chance to return to their homes, process their caribou, and get "cleaned up" before school starts.

A minority of the HMC members favored a specific season starting date of August 14 because they believe that hunting pressure can easily change the direction of a caribou herd's migration during the early part of the season, and that hunting pressure would be increased by the state and federal season both opening on August 10. If this happens, then they believe the Fortymile herd will not migrate to traditional hunting grounds around American Summit and elsewhere. These members stated that this has happened many times, and it is one of the key reasons they have recommended a later start date for the Fortymile Herd registration permit hunt. They stated that turning of the lead animals and the negative impact on migration is very well documented in interviews with elders in the arctic and the same holds true in the eastern Interior.

The following codified language was crafted in accordance with direction from a majority of the HMC.

Resident Open Season (Subsistence and General Hunts)

Nonresident Open Season

Units and Bag Limits (15)

. . .

Units 20(B) and 20(F), those portions south of the Yukon River, and north and east of a line formed by the Richardson Highway from the Unit 20(D) boundary to its intersection with the Steese Highway, north along the Steese Highway to its intersection with the Elliot Highway, then northwest along the Elliot Highway to its intersection with the Dalton Highway, then north along the Dalton Highway to the Yukon River, and Unit 20(D) that portion north of the south bank of the Tanana River

Resident Open Season (Subsistence and

(Subsistence and Season Nonresident Open Season

Units and Bag Limits

RESIDENT HUNTERS:

1 caribou by registration permit only;

1 caribou by drawing permit only, up to 30 permits may be issued within the Fortymile Caribou Youth Hunt Management Area, or

1 caribou by limited registration permit only, during a season that may be announced by emergency order within a portion of the area during Dec. 1 – Mar. 31

Aug. 10–Sept. 30 Dec. 1–Mar 31 Aug. 10–Aug 21

(To be announced by emergency order)

NONRESIDENT HUNTERS:

1 bull by registration permit only; or 1 caribou by drawing permit only, up to 30 permits may be issued within the Fortymile Caribou Youth Hunt Management Area, Aug. 10–Sept. 20 Aug. 10–Aug 21

...

Unit 20(E)

RESIDENT HUNTERS:

1 caribou by registration permit only; or

1 caribou by drawing permit only, up to 30 permits may be issued within the Fortymile Caribou Youth Hunt Management Area, or

1 caribou by registration permit only, during a season for up to three days that may be announced by emergency order within a portion of the area during the period Oct. 20 – Nov. 30; or

Aug. 10–Sept. 30 Dec. 1–Mar 31 Aug. 10–Aug 21

(Season to be announced by emergency order)

Units and Bag Limits

1 caribou by limited registration permit only, during seasons that may be announced by emergency order within a portion of the area during Dec.1 – Mar. 31

NONRESIDENT HUNTERS:

1 bull by registration permit only; or 1 caribou by drawing permit only, up to 30 permits may be issued within the Fortymile Caribou Youth Hunt Management Area, or

..

(20)

...

Unit 25(C)

RESIDENT HUNTERS:

1 caribou per regulatory year, only;

1 caribou by drawing permit only, up to 30 permits may be issued within the Fortymile Caribou Youth Hunt

Management Area, or

1 caribou by limited registration permit only, during a season that may be announced by emergency order within a portion of the area during Dec.

1 - Mar. 31

NONRESIDENT HUNTERS:

1 bull by registration permit only; or 1 caribou by drawing permit only, up to 30 permits may be issued within the Fortymile Caribou Youth Hunt Management Area Resident Open Season (Subsistence and General Hunts)

(Season to be announced by emergency order)

Nonresident Open Season

Aug. 10–Sept. 20 **Aug. 10–Aug 21**

Aug. 10 - Sept. 20

Aug. 10 - Sept. 20 Dec. 1 - Mar. 31 Aug. 10-Aug 21

(Season to be announced by emergency order)

Aug. 10 - Sept. 20 Aug. 10-Aug 21 92.530 Management areas.

The following management areas are subject to special restrictions:

. . .

(27) Fortymile Caribou Herd Youth Hunt Management Area;

(A) the area consists of:

- (i) Unit 20(B), that portion within the Chatanika River drainage north of the Steese Highway and east of the Elliott Highway, and that portion south and east of the Steese Highway, except the Middle (East) Fork of the Chena River drainage upstream from and including the Teuchet Creek drainage and except the Salcha River drainage. AND Unit 25(C), that portion east of the east bank of the mainstem of Preacher Creek to its confluence with American Creek, then east of the east bank of American Creek, excluding that portion within the drainage of the south fork of Birch Creek and excluding that portion within the Yukon-Charley Rivers National Preserve.
- (ii) that area of Unit 20(E) not including the following: that portion within the Charley River drainage, the Seventymile River drainage upstream from and including the Granite Creek drainage, the North Fork of the Fortymile River drainage upstream from, but not including the Champion Creek drainage, the Middle Fork of the Fortymile River drainage upstream from and including the Joseph Creek drainage, the Mosquito Fork of the Fortymile River drainage upstream from and including the Wolf Creek drainage, all drainages flowing into the Yukon River downstream from the confluence of the Seventymile River and Yukon River.
- (B) in addition to other legal seasons, the area is open to caribou hunting during a 7-day season by drawing permit issued to a child; the department may issue a permit to a child, as follows:
- (i) a permit may be issued to a child aged 10 to 15 who will be accompanied in the field by an adult 21 years of age or older, with the child being the permittee;
- (ii) permittees, including permittees in the Unit 25(C) portion of the management area, must have successfully completed a certified basic hunter education course.
- (iii) a caribou harvested under a permit issued under this section will count against the bag limits of both the child and accompanying adult;
- (iv) only the child may shoot a caribou, except that the accompanying adult may shoot the animal only to prevent the animal from escaping after having been wounded by the child; (v) a child may take only one caribou per lifetime under this permit;
- (vi) in addition to the permit specified in this section, the child and accompanying adult must have the licenses, harvest tickets, and tags required under this title and AS 16 in possession while in the field.

PROPOSAL 126

EFFECT OF THE PROPOSAL: This regulation would prohibit some pack animals from being used for big game hunting.

DEPARTMENT RECOMMENDATION: Adopt