

5 AAC 92.125. Predation control areas implementation plans.

Mulchatna Caribou Herd Predation Management Plan. Notwithstanding any other provisions in this title, and based on the following information contained in this section, the commissioner or the commissioner's designee may conduct a wolf population reduction or wolf population regulation program in the range of the Mulchatna Caribou Herd in Units 17B, 17C, and 9B:

(1) the Mulchatna Caribou Herd Predation Management Area is established to increase the Mulchatna Caribou Herd (MCH) within Units 9B, 17B, and 17C to aid in achieving intensive management objectives; the Mulchatna Caribou Herd Predation Management Area encompasses approximately 22,000 square miles; the active control area will be confined to a 5,000 square mile area that includes 23 percent of the management area and encompasses the calving grounds of the MCH;

(2) the discussion of wildlife populations and human use information is as follows:

(A) MCH population and human use information is as follows:

(i) the MCH was estimated to contain 14,231 caribou in October 1974; increased to 200,000 caribou by 1996; and declined to between 30,000 and 40,000 by 2008;

(ii) nutritional limitations are not currently implicated as a factor affecting the current status of the MCH;

(iii) from 2000 through 2005, an average of 73 percent of radiocollared cows that were 36 months of age or older exhibited signs of pregnancy; from 2006 through 2010, an average of 75 percent of radiocollared cows that were 36 months of age or older exhibited signs of pregnancy;

(iv) October calf-to-cow ratios from surveys conducted from 1974 through 1999 averaged 43.5 calves per 100 cows (range 14.1 – 64.5); calf-to-cow ratios from surveys conducted from 2000 through 2010 averaged 22.8 calves per 100 cows (range 15.8 – 31.0);

(v) fall caribou calf recruitment is lower than expected based on the observed calf production; the department will conduct a caribou calf mortality study in May 2011 to estimate calf survival rates and causes of caribou calf death;

(vi) October bull-to-cow ratios from surveys conducted from 1974 through 1999 averaged 48.6 bulls per 100 cows (range 14.1-64.5); bull-to-cow ratios from surveys conducted from 2000 through 2010 averaged 21.2 bulls per 100 cows (range 15.8 – 31.0);

(vii) the harvestable surplus is estimated to be 1,050 caribou in 2010;

(viii) the intensive management population objective established by the board for the MCH is 30,000 - 80,000 caribou; the intensive management harvest objective is 2,400 – 8,000 caribou annually;

(ix) reported human harvest from the MCH was 4,770 caribou in 1998; estimates of reported and unreported harvest suggest that actual harvest may have exceeded 10,000 caribou during some years in the mid-1990s; annual reported human harvest has declined continually since 1998; reported harvests declined from 4,467 caribou in 1999 to 309 caribou in 2009; reported human harvest between 1999 and 2010 were not an important factor in the recent decline;

(B) the predator population and human use information is as follows:

(i) wolves are a major predator of caribou in the range of the MCH;

(ii) while no current aerial population survey data are available for the wolf population in Units 17 and 9B, recent anecdotal evidence obtained from pilots and local residents indicates that wolves are abundant throughout the area; the department intends to conduct surveys to estimate wolf abundance prior to implementing this predation reduction plan;

(iii) in 2008, the wolf population in Unit 9B was estimated at 60 - 90 wolves in 8 - 12 packs based on habitat type and prey base ; in 2002 the Unit 17B population was 280–320 wolves in 16–22 packs and the Unit 17C population was 150–200 wolves in 10–16 packs.

(iv) since 2000, an average of 18 wolves (range of 8 - 36 wolves) have been harvested annually in Unit 9B, 39 wolves (range of 6-64 wolves in Unit 17B, and an average of 32 wolves (range 1-64) wolves in Unit 17C;

(v) research into the causes of caribou calf mortality indicate that wolves are a major predator of caribou calves in Southwest Alaska; research into the causes of caribou calf mortality on the Alaska Peninsula indicate that wolves are responsible for approximately 50 percent of calf deaths during the first two weeks of life.

(vi) brown bears are important predators of caribou in Southwest Alaska; while brown bears have been known to kill adult caribou opportunistically, brown bears are effective predators of calves during the first 10 days of life;

(vii) brown bears are abundant throughout the Mulchatna Caribou Herd Predation Management Area; spring brown bear density in Unit 9B was estimated at 50 brown bears per 1,000 square kilometers in May 2003;

(viii) research into the causes of caribou calf mortality indicates that brown bears are typically responsible for up to 40 percent of the calf deaths during the first two weeks of life;

(3) predator and prey population levels and objectives and the basis for those objectives are as follows:

(A) the intensive management population objective established by the board for the MCH is 30,000 - 80,000 caribou; the intensive management harvest objective is 2,400 – 8,000 caribou annually; intensive management objectives were established by the board based on historic information regarding population numbers, habitat limitations, human use, and sustainable harvests; ;

(B) before July 1, 2011, wolf population objectives for Unit 9 were to maintain a wolf population that can sustain a three-year-annual harvest of 50 wolves; before July 1, 2011, wolf population objectives for Unit 17 were to maintain a wolf population that can sustain an annual harvest of at least 25 wolves;

(C) brown bear population objectives in Unit 9 are to maintain a high density bear population with a sex and age structure that can sustain a harvest composed of 60 percent males, with 50 males eight years of age or older during combined fall and spring seasons; brown bear population objectives for Unit 17 are to maintain a brown

bear population that will sustain an annual harvest of 50 bears composed of at least 50% males.

(4) justification, objectives, and thresholds for the predator management implementation plan are as follows:

(A) justification for the Mulchatna Caribou Herd Predation Management Area is based on the board decision to designate the MCH as being important for providing high levels of human consumptive use; the boundaries of the Mulchatna Caribou Predation Management Area correspond to the current and range of the MCH within Units 9B, 17B&C; the board established the objectives for population size and annual sustained harvest of caribou in the herd's range consistent with multiple use and principles of sound conservation and management of habitat and all wildlife species in the area;

(B) the objective of the Mulchatna Caribou Predation Management Plan is to enhance the recovery of the MCH and to achieve a population sex and age structure that will sustain human harvests within the objectives established by the board for this herd; the goal of this program will be to reduce wolf numbers in the control area that encompasses the calving grounds of the MCH; the control area will be defined annually by the department based on previous caribou calving locations; the control area will be limited to 5,000 square miles which includes 23 percent of the lands within the Mulchatna Caribou Herd Predation Management area; because the management activities authorized by this plan are limited to the control area the program will not affect all wolves within the Mulchatna Caribou Herd Management Area;

(C) the commissioner may initiate the reduction of wolf numbers in the control area within the range of the MCH according to the following thresholds:

(i) the caribou population is below intensive management population or harvest objectives;

(ii) nutrition is not considered the primary factor limiting caribou population growth; and

(iii) calf recruitment is the most important factor limiting population growth and calf survival during the first four weeks of life is less than 50 percent;

(E) the commissioner will suspend the wolf reduction program if the following conditions are observed pending further review by the board to determine if the program can be modified to achieve the objectives of this program before reinstating the program, except that hunting and trapping by the public specified in other sections of this title may continue and are not subject to this subparagraph:

(i) caribou nutritional indices such as pregnancy rates, calf and adult body mass, or other condition indices exhibit a declining trend from current values and the bull ratio is greater than 20 bulls:100 cows;

(ii) fall caribou calf ratios remain below 20 calves per 100 cows for three consecutive years of wolf removal from the control area;

(iii) the bull ratio remains below the caribou population objectives and does not increase for three consecutive years of wolf removal from the control area;

(F) the commissioner may continue to reduce wolf numbers in the control area within the range of the MCH until the following thresholds are met without the benefit of wolf control:

- (i) the bull-to-cow ratio can be sustained within management objectives and the fall calf-to-cow ratios can be sustained above 30 calves per 100 cows;
- (ii) the population can grow at a sustained rate of 5 percent annually without the benefit of wolf control or caribou population objectives are met; or
- (iii) caribou harvest objectives are met;

(G) the wolf population objective for the Mulchatna Caribou Herd Predation Management Area is to annually reduce the number of wolves to a level that results in increased calf survival in caribou calving areas within Units 9B and 17B and 17C;

(H) the department will utilize radio-telemetry, wolf surveys, or a combination of those methods to ensure that a viable wolf population persists outside of active treatment areas with the range of the MCH;

(I) reduction of predators by humans is necessary to promote recovery of the caribou population;

(H) reduction of wolf numbers in control areas defined by the seasonal distribution of caribou is expected to stop the caribou population decline;

(I) reduction of bear numbers remains unlikely due to the high density of brown bears in Unit 9 and 17, logistical limitations, and competing management priorities;

(5) the authorized methods and means used to take wolves are as follows:

(A) hunting and trapping of wolves by the public in treatment areas during the term of the management program may occur as provided in the hunting and trapping regulations set out elsewhere in this title, including the use of motorized vehicles as provided in 5 AAC 92.080;

(B) the commissioner may issue public aerial shooting permits, public land and shoot permits, allow agents of the state to conduct aerial shooting, or allow department employees to conduct aerial shooting as a method of wolf removal under AS 16.05.783, including the use of any type of aircraft;

(C) the commissioner may authorize the use of state employees or state-owned or charter equipment, including helicopters, as a method of wolf removal under AS 16.05.783;

(6) the anticipated time frame and schedule for update and reevaluation are as follows:

(A) for up to six years beginning July 1, 2011, the commissioner may reduce the wolf populations in the Mulchatna Caribou Herd Predation Management Area;

(B) annually the department shall, to the extent practicable, provide to the board at the board's spring meeting a report of program activities conducted during the preceding 12 months, including implementation activities, the status of caribou, wolf, and brown bear populations, and recommendations for changes, if necessary to achieve the objectives of the plan;

(7) other specifications that the board considers necessary:

(A) the commissioner shall suspend wolf control activities

(i) when prey population management objectives are obtained;

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- (ii) when predation management objectives are met; or
 - (ii) upon expiration of the period during which the commissioner is authorized to reduce predator numbers in the predator control plan area;
- (B) the commissioner shall annually close wolf hunting and trapping seasons as appropriate to ensure that the minimum wolf population objectives are met.