

The attached plan, or substantially similar language, will be submitted to the Board of Game at its November, 2011 meeting as Departmental recommendations for substitute language if the Board decides to proceed with adopting proposals 35 and 36, which are listed in the 2011-2012 Proposed Changes to Regulations booklet. The topic of developing intensive management plans for Units 15A and 15C has been under discussion and subjected to public comment several times at recent meetings, and has been again noticed for the November meeting. Final wording for such plans is developed during the meetings, following Departmental input and public comment, and the Department does not normally have the ability to submit its recommendations on proposed final language several weeks in advance of the meetings. However, in order to solicit the best informed public comment on what for many is a very controversial topic, the Department has prepared and is publicizing its suggested substitute language now, well in advance of the meeting, in this particular case. The public is encouraged to study these submissions and provide specific comments to the Board for its consideration of proposals 35 and 36.

PROPOSAL 36 -5 AAC 92.125. Intensive management plans. Approve an intensive management plan for moose in Unit 15C.

(x) **Unit 15C Wolf Predation Control Area.** 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 Unit 15(C):

- 1) the Unit 15C Predation Control Area is established and consists of all lands within Unit 15(C) north of Kachemak Bay including the Fox River Flats (1171 square miles);
- 2) the Intensive Management population and harvest objectives for moose in Unit 15(C) are 2500–3500 and 200–350, respectively; while the past harvest has been within intensive management objectives, the goal is to reduce calf mortality to reverse the long-term decline of the bull:cow ratio; with improved calf survival, the sustained yield would be within harvest objectives; three major predators, brown bears, black bears and wolves occur in the unit; reducing wolves will be the initial focus; with the wolf population likely numbering between 40-75 wolves, wolf control objectives will be to remove 25-60 wolves from the population through trapping, hunting, and wolf control activities but retain at least 15 wolves; wolf surveys will be conducted to determine the current wolf population size and the level of take that will ensure the minimum population objective is met;
- 3) the discussion of wildlife populations and human use information is as follows:
 - a) the moose population and harvest information in Unit 15(C) is as follows:
 - i) the moose population size was estimated in 2010 at 2919 moose (95% confidence interval=277) and at 2079 moose (95% confidence interval=439) in 1992; this shows a 40% increase in the moose population between 1992 and 2010; the moose population is currently within intensive management objectives for population size;
 - ii) as a result of conservation concerns the board reduced the moose bag limit for moose and the preliminary 2011 harvest is 29 cows and only 12 bulls; the average yearly harvest during the past decade (2001-2010) has been 275 moose; compared to the average yearly harvest of 260 moose the previous decade (1991-2000) and an average yearly harvest 198 moose during the decade from 1981-1991; the harvest has been within intensive management objectives and generally higher than harvest from the

1980s but harvest restrictions adopted by the board in 2011 will reduce the harvest below intensive management objectives in 2011 and in 2012;

- b) the moose population in 2011 showed a 30% twinning rate and does not appear greatly limited by habitat; fall surveys in 2010 showed 19 calves:100 cows; at a predicted calving rate of 80% with 30% twinning, spring 2010 calf ratios may have yielded 104 calves:100 cows where 85 calves:100 cows were assumed lost from approximately June to November likely due to predation;
 - c) a reduction of predation can reasonably be expected to aid in continuing to meet the intensive management harvest objectives at a higher level than have previously been achieved through both bull and antlerless harvest; if temporary antler restrictions in place through the 2012 season are eliminated at the 2013 board meeting, the future sustainable harvest of moose in Unit 15(C) is predicted to remain below intensive management objectives;
 - d) the wolf harvest over the past decade in Unit 15(C) has ranged between 10–21 wolves taken each year with a mean of 14 wolves; the wolf population in Unit 15(C) is likely between 40-75 wolves, the harvest of wolves has been inadequate to reduce wolf numbers considering yearly growth; assuming a pre-winter population of 40-75 wolves, based on managers experience in this area harvest must be greater than 50% of the wolf population per year from all methods (trapping, hunting, and wolf control) to reduce annual wolf population growth and result in a reduction in predation rates on moose; the past hunting and trapping harvest of wolves has not been adequate at reducing the wolf population; based on past trapping and hunting harvest, additional efforts are needed to reduce the wolf population; the hunting season and bag limit for wolves has remained unchanged since 1989 but the bag limit on the Kenai National Wildlife Refuge, which was limited to 2 wolves per year on the refuge, was liberalized to 5 wolves per year in 2011; the trapping season and bag limits have been the same since 1997; additional active management methods are necessary to further reduce the wolf population;
 - e) roughly 25% of the portion of Unit 15(C) described in (1) is Federal land, 40% is private land, and 35% is state/borough land; wolf control will be initiated pending authorization by land managers/owners; and
 - f) with current harvest levels well below Intensive Management objectives, any increase in sustainable harvest will benefit Alaska residents;
- 4) the authorized methods and means used to take wolves include: hunting and trapping of wolves by the public in Unit 15(C) during the term of the management program as provided in the hunting and trapping regulations; the commissioner may issue public aerial shooting permits, public land and shoot permits, or allow agents of the state, or department employees to conduct aerial, land and shoot, or ground-based shooting as a method of wolf removal under AS 16.05.783, including the use of any type of aircraft; prey harvest may include bull-only harvests with variable combinations of antler restrictions, any-bull hunts, and/or antlerless harvest;
- a) Factors described in Section 3 and other considerations unique to the situation indicate that aerial shooting of wolves by members of the public under permit is the most feasible option to reduce predation in the management area described in Section 1 to a level sufficient to improve survival of moose and the potential for population growth.

- b) Based on measured response of biological parameters indicating less than sufficient improvement in survival of moose to reach the upper levels of intensive management objectives for harvest, methods to improve moose survival will include same day airborne shooting of wolves by members of the public under permit, and airborne shooting of wolves by the Department;
- 5) the anticipated time frame, schedule for update and reevaluation and conditions for termination of the plan are as follows:
 - a) this plan is for 5 years (January 2012–January 2017) unless renewed;
 - b) annually the department shall, to the extent practicable, provide to the board a report of program activities conducted during the preceding 12 months, including implementation activities, the status of the moose and wolf populations, and recommendations for changes, if necessary to achieve the objectives of the plan;
 - c) predator control activities shall be terminated;
 - i) when the intensive management objectives for the moose population size and harvest are obtained; or
 - ii) upon expiration of the period during which the commissioner is authorized to reduce predator numbers in the predator control plan area;
- 6) the program will be reviewed and suspended if one of the following conditions are met:
 - a) if the moose population exceeds 3.0 moose per square mile;
 - b) when one or more measure of nutritional stress (e.g., pregnancy rates, rump fat, age at first reproduction, short yearling weights, or twinning rates) shows a decline in 3 consecutive years;
 - c) if after 3 years, any measure consistent with significant levels of nutritional stress [e.g., twinning rates less than 20%, adult female (greater than 2 years old) pregnancy rates less than 80%] fails to improve to levels no longer showing significant levels of nutritional stress [e.g., twinning rates greater than or equal to 20%, adult female (greater than 2 years old) pregnancy rates greater than or equal to 80%];
 - d) if the wolf population falls below 15 wolves at any time during the program as estimated from one or more of the following techniques: population survey, population census, modeling, harvest, or pilot and trapper interviews;
- 7) Supporting and implementing documentation for this IM Plan are found in the Operational Plan for Intensive Management of Moose in Game Management Unit 15A, 2012-2017; October 2011, and the Feasibility Assessment for Moose in Game Management Unit 15A, 2012-2017; October 2011.