Note: Proposal 270 was accepted by the Board of Game as an Agenda Change Request for consideration at the Statewide Regulations meeting scheduled for March 2022.

PROPOSAL 270

5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.

Open an antlerless moose hunt in a portion of Unit 20E as follows:

<u>Unit 20E – that portion within the Ladue River drainage upstream of but excluding the South</u> <u>Fork of the Ladue River, the Dennison Fork of the Fortymile River drainage excluding the</u> <u>East Fork drainage, and the Mosquito Fork of the Fortymile River drainage.</u>

<u>Resident and Nonresident Hunters</u> <u>August 5 ¬ September 5 and October 15 – November 30</u> <u>1 antlerless moose by youth drawing permit only; up to 100 permits may be issued; a person</u> <u>may not take a cow accompanied by a calf; OR</u>

Resident Hunters

October 15 – November 30

<u>1 antlerless moose by drawing permit only; up to 400 permits may be issued; a person may not take a cow accompanied by a calf.</u>

WHAT IS THE ISSUE YOU WOULD LIKE THE BOARD TO ADDRESS AND WHY? The moose population within a portion of southern Unit 20E has shown consistent growth since 2005 and has approximately doubled since then, with the cow component of the population growing at a significantly faster rate than the bull component of the population. Limited antlerless harvest would: 1) slow population growth to avoid habitat damage while ensuring long-term sustainability of the population and the increased yield it is currently capable of supporting, 2) help achieve intensive management (IM) harvest objectives, and 3) provide the management flexibility to rapidly respond to changes in nutrition.

As this population approaches carrying capacity, stabilizing growth will prevent long-term damage to habitat and help to ensure a high yield that is sustainable long-term. The population is currently healthy, however taking this action will reduce the likelihood of having to reduce the population with limited options in the future. Implementing an antlerless hunt in this area will begin a process that will allow hunt managers to slow population growth.

There are several aspects of this population that warrant immediate attention:

First, the moose population has grown steadily since 2005. Moose densities within a 1,821 mile² area along the Taylor Highway in southern Unit 20E increased from 0.68 moose/mi² in 2005 to 1.36 moose/mi^2 in 2020, with an estimated annual growth rate of 4.9%. The cow segment of the population grew at an estimated 5.8% per year while the bull segment of the population, which is limited by higher natural mortality and harvest, grew at half the rate. Reducing the population

growth rate will increasingly be dependent on the ability to control the growth of the female component of the population. Although twinning rates are currently nominally healthy at 39% (2018-2021 3-year weighted average), the department is closely monitoring them given the potential for twinning rates to lag as a reflection of population-level nutritional condition.

Second, if current population growth rates continue, the ability to stabilize or reduce the population in the future might be inhibited by social and logistical issues. Although portions of the area are road accessible, large portions are more remote; therefore, it may take some time to develop the capacity to effectively harvest cows within the area. This request would allow for more incremental change that could potentially preempt more rapid and severe management action that may be necessary to address changes in nutritional condition if the current growth rate continues unabated.

This request would allow for antlerless harvest opportunity. Delaying regulatory action now may increase the potential for the moose population to exceed carrying capacity. This could result in the need for larger harvests that can often become socially difficult to implement. Furthermore, delayed action could result in density-dependent changes to demography and abundance that reduce yield through loss of productivity or density-dependent mortality.

The purpose of this request is to allow for antlerless harvest opportunity within a portion of Unit 20E, independent of final allocative decisions. Although the proposed regulations contain allocative components, as do all harvest regulations, the proposed allocation aligns with other antlerless moose youth and regular draw permits. The proposed antlerless harvest opportunity would be open to residents and nonresidents for the youth permit and for residents only for the regular draw permit.

PROPOSED BY: Alaska Department of Fish & Game	(HQ-F21-ACR7)
