

**PROPOSAL 160 – 5 AAC 85.045(18). Hunting seasons and bag limits for moose.**  
 Reauthorize antlerless moose hunting seasons in Unit 20D as follows:

<b>Units and Bag Limits</b>	<b>Resident Open Season (Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
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Unit 20(D), that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River, except the Delta Junction Management Area and the Bison Range Controlled Use Area

**RESIDENT HUNTERS:**

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1 antlerless moose by drawing permit only; up to 1,000 permits may be issued in combination with that portion in the Delta Junction Management Area; a person may not take a calf or a cow accompanied by a calf; or

Oct. 10–Nov. 25  
(General hunt only)

1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf

Oct. 10–Nov. 25  
(General hunt only)

...

Unit 20(D), that portion within the Delta Junction Management Area

RESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit only, a person may not take a calf or a cow accompanied by a calf; or

Sept. 1–Sept. 15  
(General hunt only)

...

1 antlerless moose by drawing permit only; up to 1,000 permits may be issued in combination with that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River; a person may not take a calf or a cow accompanied by a calf; or

Oct. 10–Nov. 25  
(General hunt only)

1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf

Oct. 10–Nov. 25  
(General hunt only)

NONRESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit only, a person may not take a calf or a cow accompanied by a calf; or

Sept. 1–Sept. 15

...

**What is the issue you would like the board to address and why?** Antlerless moose hunts must be reauthorized annually. The objectives of the Unit 20D antlerless moose hunts are to 1) stabilize population growth of this high-density moose population; 2) address concerns about range degradation, reduced nutritional condition, and reduced reproductive success; 3) make progress toward meeting the Unit 20D intensive management (IM) harvest objective of 500–700 moose; and 4) provide youth and disabled veteran hunting opportunity. These objectives are being met.

If antlerless moose hunts are not reauthorized, the moose population could quickly increase to undesirable levels. Opportunity to hunt a harvestable surplus of cow moose would be lost, and

our ability to meet IM harvest objectives could be compromised. Additionally, the population may need to be reduced dramatically when new data are available and analyzed.

Antlerless moose hunts are offered in southwest Unit 20D, which has the highest moose density in the unit. This area has great potential for population growth due to an abundance of high quality moose habitat created from extensive land clearing for agricultural use and multiple wild fires over the past 30 years. Total moose harvest in all of Unit 20D averaged 278 moose (an average of 272 bulls and six antlerless moose) during regulatory year (RY) 2014 and RY2015.

Antlerless hunting opportunity is limited. The largest antlerless harvest (n=113) that occurred recently in Unit 20D was in 2009 when antlerless hunts were newly authorized. The southwest Unit 20D population estimate (approximately 4,000–4,500 moose, with a sightability correction factor applied) and bull harvest in southwestern Unit 20D (135–165) have been stable since 2011. The 2014 population estimate for southwest Unit 20D was 4,321 moose (corrected for sightability) with a density of 3.2 moose per square mile, 38 calves:100 cows and 32 bulls:100 cows.

Antlerless harvest will likely be needed to maintain the population at the optimal density and will help make progress toward the IM harvest objective of 500–700 moose without reducing bull:cow ratios below the management objectives. The population trend and harvest rate suggest the low, consistent antlerless harvest provided by the drawing permit hunts in Unit 20D, in conjunction with other mortality factors (including ceremonial harvest, vehicle collision, accidents, and predation), is an appropriate rate of antlerless mortality that contributes to stability in the southwest 20D moose population.

The Department of Fish and Game will continue to evaluate antlerless moose hunts and their effect on moose density and population growth. Future antlerless moose hunts will be implemented as needed based on evaluation of three indices of density-dependent moose nutritional conditions in relation to changes in moose density: biomass removal of current annual growth on winter browse, proportion of females with twin calves, and late-winter calf weights.

Additional drawing permits or registration permits will be issued only if more harvest is needed in specific areas to maintain optimal moose densities.

**PROPOSED BY:** Alaska Department of Fish and Game (HQ-F17-051)  
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