## **PROPOSAL 94**

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

Reauthorize the antlerless moose hunting seasons in Unit 20D as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(18)		

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 [YOUTH HUNT MANAGEMENT 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

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

...

Unit 20(D), that portion within the Bison Range Controlled Use Area

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1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 10 permits may be issued; a person may not take a calf or a cow accompanied by a calf;	Sept. 1–Sept. 30	Sept. 1–Sept. 30
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	
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	
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	
NONRESIDENT HUNTERS:		
1 moose every four regulatory years by drawing permit only, a person may not take a calf or a		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

cow accompanied by a calf; or

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 levels beyond the ability of the habitat to support the moose population. Opportunity to hunt a harvestable surplus of cow moose would be lost, and the 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 wildfires over the past 30 years. Total moose harvest in all of Unit 20D averaged 280 moose (an average of 263 bulls and 16 antlerless moose) during regulatory years 2016 and 2017.

Antlerless hunting opportunity is limited at present because this small opportunity helps to maintain the moose population within the ability of habitat to support the population. 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 (226–282) have been stable since 2011. The 2017 population estimate for southwest Unit 20D was 4,553 moose (corrected for sightability) with a density of 3.4 moose per square mile, 40 calves:100 cows and 22 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 moose mortality that contributes to stability in the southwest Unit 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 or registration permits will be issued only if more harvest is needed in specific areas to maintain optimal moose densities.