

**PROPOSAL 180**

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

Reauthorize the antlerless moose seasons in Unit 20A as follows:

| <b>Units and Bag Limits</b>   | <b>Resident<br/>Open Season<br/>Subsistence and<br/>General Hunts</b> | <b>Nonresident<br/>Open Season</b> |
|---|---|------------------------------------|
| (18)  |   |                                    |
| Unit 20(A), the Ferry Trail Management Area, Wood River Controlled Use Area, and the Yanert Controlled Use Area   |   |                                    |
| RESIDENT HUNTERS:   |   |                                    |
| ...   |   |                                    |
| 1 antlerless moose by drawing permit only; up to 2,000 permits may be issued in combination with the Remainder of Unit 20(A); a person may not take a cow accompanied by a calf; or | Aug. 15–Nov. 15   |                                    |
| 1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or   | Oct. 1–Feb. 28  |                                    |
| ...   |   |                                    |
| 1 moose by targeted permit only; by crossbow shotgun, or bow and arrow only; up to 100 permits may be issued  | Season to be announced by emergency order                             |                                    |
| ...   |   |                                    |
| Remainder of Unit 20(A)   |   |                                    |

RESIDENT HUNTERS:

...

1 antlerless moose by drawing permit only; up to 2,000 permits may be issued in combination with Unit 20(A), the Ferry Trail Management Area, Wood River Controlled Use Area, and the Yanert Controlled Use Area; a person may not take a cow accompanied by a calf; or

Aug. 15–Nov. 15

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

Aug. 25–last day of Feb.

...

1 moose by targeted permit only; by crossbow, shotgun, or bow and arrow only; up to 100 permits may be issued

Season to be announced by emergency order

...

**What is the issue you would like the board to address and why?** Antlerless moose hunting seasons must be reauthorized annually. Antlerless hunts are important for maintaining the moose population at levels that the habitat can support. Antlerless hunts also help regulate moose population growth, help to meet Intensive Management (IM) objectives for high levels of harvest, and provide subsistence hunters with a reasonable opportunity to pursue moose for subsistence uses without reducing bull-to-cow ratios.

If antlerless moose hunts are not reauthorized, the moose population could increase to levels beyond the ability of the habitat to support the moose population. Allowing the population to grow beyond what the habitat can support may require the population to be reduced dramatically to avoid long term habitat damage. Opportunity to hunt a harvestable surplus of cow moose would be lost, and the ability to meet IM harvest objectives could be compromised. Subsistence hunters in the portion of Unit 20A outside the Fairbanks nonsubsistence area (part of the western Tanana

Flats) may not have a reasonable opportunity to pursue moose for subsistence uses.

Reauthorizing antlerless moose hunts will allow hunting opportunity and harvest to increase and allow the Department of Fish and Game to manage the moose populations at an optimum level. The additional harvest will help in meeting IM harvest objectives without reducing bull-to-cow ratios. Meat and subsistence hunters will benefit from the opportunity to harvest cow moose. Moose populations will benefit by maintaining moose densities at a level compatible with their habitat. Motorists and residents may benefit from reduced moose–vehicle collisions and moose–human conflicts.

The current objective is to maintain moose numbers within the IM population objective of 10,000–15,000 moose, while monitoring indicators of moose and habitat condition for positive density-dependent responses. The Unit 20A population was estimated at between 12,100–15,900 moose (90% confidence interval) in November 2021. There is an estimated 5,040 mi<sup>2</sup> of moose habitat in Unit 20A which equates to a moose density of between 2.4 and 3.2 moose/mi<sup>2</sup>. The median of this estimate falls within the IM population objective but at the upper end. The department does not want the population to further increase because of concerns about density effects such as twinning rates below 20% and short-yearling weights below 400 pounds, both of which indicate a nutritionally stressed population. The department will continue to monitor Unit 20A twinning rates and short yearling weights and may recommend fewer antlerless hunts in the future if these two thresholds are surpassed. However, at the current density of moose the intention is to harvest moose at a rate of 1% of the population which has been shown to stabilize the moose population at its current level. Antlerless harvest will be by drawing permits for a majority of Unit 20A and a registration permit outside the Fairbanks nonsubsistence area in northwest Unit 20A near Nenana. The harvest objective will be based on the most recent survey results. The three-year average antlerless moose harvest in Unit 20A is 80 moose. The department did not issue antlerless moose permits in 2022 because of a severe 2021/2022 winter and the anticipated high mortality. The department will evaluate overwinter survival and other factors throughout 2022 and early winter 2023 to determine if and how many antlerless permits will be issued in fall 2023.

The number of moose in Unit 20A was estimated at 17,768 (3.5 moose/mi<sup>2</sup>) in 2003. Research indicated this high-density moose population was experiencing density-dependent effects, including low productivity, relatively light calf weights, and high removal rates of winter forage. The objective beginning in regulatory year 2004–2005 (RY04) was to reduce moose numbers to the population objective of 10,000–12,000 moose (1.5–1.8 moose/mi<sup>2</sup>) unless indicators of moose condition showed signs of improvement at higher densities. In 2016, the Board of Game adopted the IM population objective of 10,000–15,000 moose and the 2021 population estimate is within the IM objective.

**PROPOSED BY:** Alaska Department of Fish and Game

(HQ-F22-045)

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