**PROPOSAL 138 - 5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.**

Reauthorize the antlerless moose seasons in Units 20A, 20B, and 20D as follows:

<table>
<thead>
<tr>
<th>Units and Bag Limits</th>
<th>ResidentOpen Season</th>
<th>NonresidentOpen Season</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(18)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 20(A), the Ferry Trail Management Area, the Wood River Controlled Use Area, and the Yanert Controlled Use Area</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RESIDENT HUNTERS:**

- 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on one side; or
- 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
- 1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or
- 1 bull by drawing permit

<table>
<thead>
<tr>
<th></th>
<th>Sept. 1–Sept. 25</th>
<th>Aug. 15–Nov. 15</th>
<th>Oct. 1–Feb. 28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident Open Season (Subsistence and General Hunts)</strong></td>
<td>(General hunt only)</td>
<td>(General hunt only)</td>
<td>(General hunt only)</td>
</tr>
<tr>
<td><strong>Nonresident Open Season</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
only; up to 1,000 permits may be issued in combination with the Remainder of Unit 20(A); or

1 bull by drawing permit only; by muzzleloader only; up to 75 permits may be issued in combination with nonresidents in Unit 20(A); or

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

NONRESIDENT HUNTERS:
1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side; or

1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side by drawing permit only; by muzzleloader only; up to 75 permits may be issued in combination with residents in Unit 20(A); Remainder of Unit 20(A)

RESIDENT HUNTERS:
1 bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side; or
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

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

1 bull by drawing permit only; up to 1,000 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; or

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

NONRESIDENT HUNTERS:
1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side

Unit 20(B), that portion within Creamer's refuge

Aug. 15–Nov. 15 (General hunt only)

Aug. 25–Feb. 28

Sept. 1–Sept. 25

Season to be announced by emergency order (General hunt only)
1 bull with spike-fork or greater antlers, by bow and arrow only; or
1 antlerless moose by bow and arrow only, by drawing permit only; up to 150 bow and arrow permits may be issued in the Fairbanks Management Area; a recipient of a drawing permit is prohibited from taking an antlered bull moose in the Fairbanks Management Area; or
1 antlerless moose by muzzle-loader by drawing permit only; up to 10 permits may be issued; a recipient of a drawing permit is prohibited from taking an antlered bull moose in the Fairbanks Management Area

Unit 20(B), remainder of the Fairbanks Management Area

1 bull with spike-fork or greater antlers, by bow and arrow only; or
1 antlerless moose by bow and arrow only, by drawing permit only; up to 150 bow and arrow permits may be issued in the Fairbanks Management Area; a recipient of a drawing permit is prohibited from taking an antlered bull moose in the Fairbanks Management Area; or

Sept. 1–Sept. 30
Sept. 1–Nov. 27
Oct. 1–Nov. 27
Dec. 1–Jan 31
Sept. 1–Nov. 27
Sept. 1–Sept. 30
Sept. 1–Nov. 27
Sept. 1–Sept. 30
Nov. 21–Nov. 27
(General hunt only)
(General hunt only)
(General hunt only)
(General hunt only)
(General hunt only)
permit is prohibited from taking an antlered bull moose in the Fairbanks Management Area; or

1 moose by targeted permit only; up to 100 permits may be issued

Unit 20(B), that portion within the Minto Flats Management Area

RESIDENT HUNTERS:
1 bull; or

1 bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side; or

1 antlerless moose by registration permit only

NONRESIDENT HUNTERS:
1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side by drawing permit only; up to 8 permits may be issued

Unit 20(B), the drainage of the Middle Fork of the Chena River

1 antlerless moose by drawing permit only; up to 300 permits may be issued; a person may not take

<table>
<thead>
<tr>
<th>Season to be announced by emergency order (General hunt only)</th>
<th>No open season.</th>
<th>Season to be announced (Subsistence hunt only)</th>
<th>No open season.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 21–Aug. 27</td>
<td></td>
<td>Sept. 8–Sept. 25</td>
<td></td>
</tr>
<tr>
<td>(Subsistence hunt only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug. 15–Nov. 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(General hunt only)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a cow accompanied
by a calf; or

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

1 bull; or

1 bull, by bow and arrow only; or

1 bull by registration permit only; by muzzleloader only

Unit 20(B), that portion of the Salcha River drainage upstream from and including Goose Creek

1 bull; or

1 bull, by bow and arrow only;

1 bull by registration permit only; by muzzleloader only

Unit 20(B), that portion of the Salcha River drainage downstream of Goose Creek and upstream from and including Butte Creek

1 bull; or

1 antlerless moose by drawing permit only; up to 1,500 permits may be issued in

Oct. 1–Feb. 28
(General hunt only)

Sept. 1–Sept. 25 Sept. 1–Sept. 25

Sept. 26–Sept. 30 Sept. 26–Sept. 30

Nov. 10–Dec. 10 No open season.
(General hunt only)

Aug. 15–Nov. 15 No open season.
(General hunt only)
combination with the
hunt in the Remainder
of Unit 20(B); a person
may not take a cow
accompanied by a calf; or

<table>
<thead>
<tr>
<th>1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or</th>
<th>Oct. 1–Feb. 28 (General hunt only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 moose by targeted permit only; by shotgun or bow and arrow only; up to 100 permits may be issued; or</td>
<td>Season to be announced by emergency order (General hunt only)</td>
</tr>
<tr>
<td>1 bull by registration permit only; by muzzleloader only</td>
<td>Nov. 10–Dec. 10 (General hunt only)</td>
</tr>
</tbody>
</table>

Unit 20(B), that portion southeast of the Moose Creek dike within one-half mile of each side of the Richardson highway

<table>
<thead>
<tr>
<th>1 bull; or</th>
<th>Sept. 1–Sept. 20 Sept. 5–Sept. 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 moose by drawing permit only; by bow and arrow or muzzleloader only; up to 100 permits may be issued; or</td>
<td>Sept. 16–Feb. 28 (General hunt only)</td>
</tr>
<tr>
<td>1 moose by targeted permit only; by shotgun or bow and arrow only; up to 100 permits may be issued</td>
<td>Season to be announced by emergency order (General hunt only)</td>
</tr>
</tbody>
</table>

Remainder of Unit 20(B)
1 antlerless moose by drawing permit only; by youth hunt only; up to 200 permits may be issued; or

1 bull; or

1 antlerless moose by drawing permit only; up to 1,500 permits may be issued in the Remainder of Unit 20(B); a person may not take a cow accompanied by a calf; or

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

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

... 

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 Youth Hunt Management Area

RESIDENT HUNTERS:
1 bull with spike-fork or 50-inch antlers or antlers by emergency order (General hunt only)

Aug. 5–Aug. 14 No open season

Sept. 1–Sept. 20 Sept. 5–Sept. 20

Aug. 15–Nov. 15 (General hunt only) No open season.

Oct. 1–Feb. 28 (General hunt only)

Season to be announced No open season.
with 4 or more brow tines on one side; or

1 bull by drawing permit; or Sept. 1–Sept. 15 (General hunt only)

1 antlerless moose by drawing permit only; Oct. 10–Nov. 25 (General hunt 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

1 antlerless moose by registration permit only; Oct. 10–Nov. 25 (General hunt only)
a person may not take a calf or a cow accompanied by a calf

NONRESIDENT HUNTERS:
1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side Sept. 5–Sept. 15

Unit 20(D), that portion within the Bison Range Youth Hunt Management Area

1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side; or 1 antlerless moose, per lifetime of a hunter, by 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 (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, Sept. 1–Sept. 15
a person may not take a calf or a cow accompanied by a calf; or (General hunt only)

1 bull with spike-fork or Sept. 1–Sept. 15
50-inch antlers or antlers (General hunt only)
with 4 or more brow tines on
one side by drawing permit
only; up to 30 permits may be
issued; or

1 antlerless moose by drawing Oct. 10–Nov. 25
permit only; up to 1,000 permits (General hunt only)
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

1 antlerless moose by Oct. 10–Nov. 25
registration permit only; (General hunt only)
a person may not
take a calf or a
cow accompanied
by a calf

NONRESIDENT HUNTERS:
1 moose every four regulatory Sept. 1–Sept. 15
years by drawing permit only, (General hunt only)
a person may not take a calf or a
cow accompanied by a calf; or

1 bull with 50-inch antlers Sept. 1–Sept. 15
or antlers with 4 or
more brow tines on one
side by drawing permit
only; up to 30 permits may
be issued
What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. Our goal is to provide for a wide range of public uses and benefits, and to protect the health and habitat of moose populations. Antlerless hunts are important for improving or maintaining the ability of moose habitat to support current populations. They 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 may increase to unacceptable levels or may need reduction when new data is available and analyzed. Opportunity to hunt a harvestable surplus of cow moose will be lost, and our ability to meet intensive management harvest objectives will 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.

This reauthorization of antlerless moose hunts will likely improve or maintain the ability of moose habitat to support the current moose population. Hunting opportunity and harvest will increase and allow ADF&G to manage these moose populations at optimum levels. The additional harvest will help in meeting intensive management harvest objectives. It will also allow hunters to harvest moose toward meeting the intensive management harvest objective without reducing bull-to-cow ratios to low levels. Meat and subsistence hunters will benefit from the opportunity to harvest cow moose. Moose populations will benefit by having moose densities compatible with their habitat. Motorists and residents may benefit from reduced moose–vehicle collisions and moose–human conflicts.

Unit 20A: The purpose of antlerless moose hunts in Unit 20A is to regulate population growth, to meet the IM mandate for high levels of harvest, and to provide subsistence hunters with a reasonable opportunity for success in obtaining moose for subsistence uses in Unit 20A outside the Fairbanks Non-subsistence Area (part of the western Tanana Flats). The goal is to protect the health and habitat of the moose population and to provide for a wide range of public uses and benefits.

The number of moose in Unit 20A was estimated at 17,768 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 unless indicators of moose condition showed signs of improvement at higher densities. The Unit 20A population was estimated at 10,272–14,115 moose (90% confidence interval) in 2012.

The current objective is to maintain moose numbers within the population objective of 12,000–15,000 moose (the IM population objective adopted by the board in 2012) while monitoring indicators of moose and habitat condition for density-dependent responses. The Unit 20A population was estimated at 8,678–11,633 moose (90% confidence interval) in 2013. As a result,
the antlerless hunts will be suspended during RY14. However, if the November 2014 population estimate exceeds 12,000 moose the antlerless hunts may need to be reinstated in RY15 to regulate population growth.

**Unit 20B: Fairbanks Management Area (FMA)** — The purpose of this antlerless hunt is to regulate population growth in the FMA and potentially reduce moose–vehicle collisions and nuisance moose problems.

The number of moose–vehicle collisions in the FMA are high and pose significant safety risks to motorists. In addition, moose nuisance issues continue to place significant demands on property owners. To increase hunting opportunity and harvest and reduce moose–vehicle collisions, ADF&G incrementally increased the number of drawing permits for antlerless moose in the FMA during RY99–RY10. Moose–vehicle collisions and moose nuisance problems have declined during RY06–RY13, presumably, in part due to the consistent antlerless moose harvests of 27 to 52 during RY09–RY13.

**Minto Flats Management Area (MFMA)** — The primary purpose of this antlerless hunt is to provide a reasonable opportunity for subsistence uses and to regulate the moose population in MFMA.

The MFMA moose density was high in 2010 (4.1 moose/ mi²). In order to reduce the moose population, harvest of antlerless moose during RY12 and RY13 was about 2.5% of the population. The fall 2013 estimate shows a more appropriate density in the MFMA (2013 = 2.6 moose/ mi²). Therefore, to stabilize this population, antlerless harvest will be reduced to approximately 1–1.5% of the total population to maintain the current population.

**Unit 20B, drainage of the Middle Fork of the Chena River and the Remainder of Unit 20B** — The antlerless moose harvest in this area is designed to regulate the moose population in this portion of Unit 20B and to help meet the IM harvest objectives for Unit 20B. The 2013 population estimate (14,057 moose) indicates the population declined from the 2009 estimate (20,173 moose) and is now at a more appropriate level for the habitat. The antlerless harvest will be approximately 1–1.5% of the total population to maintain the level of the current population estimate.

To mitigate hunter conflicts, we spread hunters out over space and time. Each of 16 hunt areas has permits in three time periods: one before the general hunt, one during, and one after. This maintains a few hunters at a time in each permit area, yet is expected to achieve a harvest of approximately 140 cows.

Finally, extensive burns in northcentral Unit 20B will provide excellent habitat in the future. With improving habitat, continued high predator harvest, and relatively mild winters, we can expect continued high productivity and survival of moose, along with increased yield.

**Unit 20D:** The moose population in Unit 20D reached the IM objective of 8,000–10,000 in 2006. The highest density (5.6 moose/ mi²) was in southwestern Unit 20D where the population was exhibiting effects of increased competition for food, including a moderately low level 2-year
average twinning rate of 14%. Antlerless moose hunts during RY06–RY09 contributed to a decreased moose density in southwestern Unit 20D. The goals of the Unit 20D antlerless moose hunts were to stabilize population growth and to address concerns about range degradation, reduced nutritional condition, and reduced reproductive success. Most of these goals have been met. Moose density was reduced from 5.6 moose/ mi² (pre-antlerless hunts) to 3.2 moose/ mi² (post-antlerless hunts). Overwinter browse utilization decreased from 25% in 2007 to 15% in 2010. The average weight of 9 month old calves increased from 340 lbs. in 2010 to 366 lbs. in 2012 (K. Seaton, ADF&G, unpublished data, Fairbanks).

With the exception of the Bison Range Youth Moose Hunt, antlerless permits have not been issued since fall 2009. However, antlerless moose will be part of the bag limit for the Delta Junction Management Area Disabled Veterans Moose Hunt, beginning in fall 2015. Future antlerless hunts are likely needed to maintain the population at the optimal density and will contribute toward meeting the IM harvest objective of 500–700. However, registration permits will be issued only if additional harvest is needed in specific areas to maintain optimal moose densities.

Antlerless moose hunts in Unit 20D and their effect on moose density and population growth will continue to be evaluated. 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. There are currently no plans to issue permits for antlerless moose hunting in Unit 20D during the 2015 season, with the exception that an antlerless moose (except a cow accompanied by a calf or a calf) is part of the legal bag limit in the Bison Range Youth Moose Hunt and the Disabled Veteran Moose Hunt.

PROPOSED BY: Alaska Department of Fish and Game (EG-C14-345)

PROPOSAL 139 - 5 AAC 5 AAC 92.015(a)(4). Brown bear tag fee exemptions. Reauthorize resident grizzly bear tag fee exemptions throughout Interior and Eastern Arctic Alaska as follows:

(a) A resident tag is not required for taking a brown bear in the following units:

... (4) Units 12, 19, 20, 21, 24, 25, 26(B), and 26(C) ...

What is the issue you would like the board to address and why? Resident brown bear tag fees were put in place statewide during the mid-1970s to discourage incidental harvest, elevate the status of brown and grizzly bears to trophies, and to provide revenue. Today, Region III populations are healthy, grizzly bears are highly regarded as trophies, and revenue can be generated from non-tag fee sources. The board must annually reauthorize all resident tag fee exemptions. Reauthorizing these tag fee exemptions will allow residents who are unable to purchase the $25 tag before hunting, due to lack of vendors or economic reasons, to opportunistically and legally harvest grizzly bears.
Eliminating all resident grizzly bear tag fees throughout Interior and Eastern Arctic Alaska (Region III) simplifies regulations, increases resident hunter opportunity, and is not likely to cause declines in these grizzly bear populations. This reauthorization would assist with our objective of managing Region III grizzly bear populations for hunter opportunity and would continue to allow hunters to take grizzlies opportunistically. During regulatory years 2006–2009, 35% of grizzlies harvested by resident hunters in Region III were taken incidentally to other activities (compared to 4% incidental take in regions I and II and 17% statewide).

We estimate that a kill rate of at least 6 percent, composed primarily of males, is sustainable. Human-caused mortality in most of Region III has been consistently less than 6% of the population. Where harvests are elevated (i.e. Units 20D, 20B, 20A, and portions of 26B), grizzly populations are managed through changes in seasons and bag limits. Resident tag fees that were in place prior to 2010 appeared to have no effect on harvest in these areas.

As part of this request to reauthorize exemption of grizzly tag fee throughout Region III, we recommend that the board, at a minimum, continue to reauthorize the tag fee exemptions for subsistence registration permit hunts in Units 19A and 19B (downstream of and including the Aniak River drainage), 21D, and 24.

PROPOSED BY: Alaska Department of Fish and Game (EG-C14-353)