

Antlerless Moose and Tag Fee Reauthorizations

PROPOSAL 113 - 5 AAC 85.045(a)(1). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Unit 1C as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(1)		
...		
Unit 1(C), Berners Bay drainages	Sept. 15—Oct. 15 (General hunt only)	Sept. 15—Oct. 15
1 moose by drawing permit only; up to 30 permits may be issued		
...		
Unit 1(C), that portion west of Excursion Inlet and north of Icy Passage		
1 moose per regulatory year, only as follows:		
...		
1 antlerless moose by drawing permit only; up to 100 permits may be issued	Nov. 10—Dec. 10 (General hunt only)	Nov. 10—Dec. 10

What is the issue you would like the board to address and why?

Berners Bay The Berners Bay (Unit 1C) strategic moose management plan calls for a post-hunt population of 90 moose based on the area’s estimated carrying capacity. ADF&G has been successful at maintaining the Berners Bay moose population close to the post-hunt population objective by implementing both bull and cow hunts.

From 1998–2006, the number of drawing permits for Berners Bay moose has ranged annually from 10 bull permits and 10 antlerless permits, to 7 bull permits and no antlerless permits. The average annual harvest of bulls during this period was 7, while in years when antlerless permits were issued the cow harvest averaged 4 annually. Although the department has had authorization to issue up to 30 total permits annually, over the past 10 years no more than 20 permits have been issued during any one year. As a result of the severe winter weather and associated population declines, no Berners Bay moose permits were issued from 2007 to 2013.

The number of drawing permits issued annually for Berners Bay is based on the number of moose observed during fall aerial surveys. The mean number of moose observed during aerial surveys conducted from 1990 to 2006 was 77 (range: 59–108). As a result of series of severe winters in 2006–07, 2007–08 and 2008–09 and associated population declines, the number of moose observed during replicate surveys conducted from 2007 to 2009 ranged from 33–62. Surveys conducted in 2010 and 2011 yielded counts of 73 moose including 10 calves each year. In 2012, under ideal survey conditions, a total of 102 moose were observed (21 bulls, 81 cows, and 14 calves). Based on the 2012 survey results, adjusted for sightability, the Berners Bay moose population was estimated at 113 ± 11 . In 2013, under less than ideal survey conditions, a total of 73 moose were observed (18 bulls, 47 cows, and 8 calves). Based on the 2013 survey results adjusted for sightability, the Berners Bay moose population was estimated at 90 ± 13 . During the most recent survey conducted in early 2014, a total of 105 moose were observed (22 bulls, 52 cows, 24 calves, and 7 unknown). Based on the 2014 survey results, the Berners Bay moose population is estimated at 109 ± 6 . While the Berners Bay moose population is not increasing rapidly, the population now exceeds the department's population and bull:cow management objectives.

A relatively small number of bull permits (5) were issued for fall 2014, as will be the case in fall 2015. The department would like to retain the ability to implement an antlerless hunt should the moose population or habitat conditions warrant this management activity.

Gustavus The Gustavus moose population (Unit 1C) increased rapidly from just a few animals in the 1980's and 1990's before eventually peaking at 404 moose in 2003. In 2002 the department estimated that the density of moose on winter range at Gustavus exceeded 5 moose per km², despite the fact that only a small portion of the area consisted of productive winter range (abundant stands of willow). Due to concerns about excessive moose numbers in Gustavus, the department initiated spring browse utilization surveys in 1999 and determined that 85–95% of the current annual growth of available willow twigs had been utilized by moose.

Due to department concerns about high moose numbers and excessive browse utilization in Gustavus, the Board first authorized an antlerless hunt for this area in fall 2000. From 2002 to 2008, hunters harvested from 11 to 67 antlerless moose annually depending on the number of permits issued. No hunt was held in fall 2007 due to high winter-related moose mortalities. No antlerless hunts have been held in the Gustavus area since 2009.

The objective of antlerless moose hunts in Gustavus is to maintain the moose population on winter range to levels commensurate with habitat capability. Based on aerial survey data, corrected for sightability, the current management strategy has been successful at maintaining

moose numbers at appropriate levels. From 2000–2009 aerial surveys yielded counts ranging from 207 to 404 moose. Surveys conducted in 2010, 2011 and 2012 yielded counts of 165, 136 and 274 moose, respectively. Based on aerial survey results corrected for sightability the moose population in the Gustavus area was estimated at 317±37 in 2012. In 2013, under favorable survey conditions, 186 moose were observed (25 bulls, 121 cows, and 40 calves). Based on the survey results, and corrected for sightability, the moose population was estimate at 323±87 in 2013. In 2014, with poor late-season survey conditions, a total of 91 moose (24 cows, 12 calves, and 55 unknown adults) were observed. Based on the survey results corrected for sightability, the moose population was estimated at 244±98. Exceptionally mild winter weather proved beneficial for moose movements and at the time of the survey several radio collared animals had already transitioned to forested summer ranges outside the survey area.

In 2008, Gustavus calf survival decreased to less than 10%. Surveys conducted from 2009 to 2012 indicate that calf survival had increased (range: 18%–37%). The moose calf survival estimate for 2013 was 21% (2014 data not yet available). From 2004–2013 the estimated annual survival rate for adult females was 89%. Given increased calf survival and stable adult female survival the potential exists for the Gustavus moose population to increase rapidly.

The Gustavus moose population is now at a level the department believes is commensurate with the amount of available winter habitat. While we currently have no plans to implement an antlerless hunt in 2015, the department believes it is important to retain the ability to implement an antlerless hunt should the moose population in the Gustavus area increase to a point detrimental to available habitat.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-139)

PROPOSAL 114 - 5 AAC 85.045(a)(3). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose season in Unit 5A, Nunatak Bench as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(3)		
Unit 5(A), that portion south of Wrangell - Saint Elias National Park, north and east of Russell and Nunatak Fiords, and east of the east side of East Nunatak Glacier to the Canadian Border	Nov. 15—Feb. 15	Nov. 15—Feb. 15

(Nunatak Bench)

1 moose by registration
permit only; up to 5
moose may be taken

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What is the issue you would like the board to address and why? The Nunatak Bench (Unit 5A) hunt area is surrounded by isolating features such as fiords and glaciers, which restrict immigration and emigration to and from adjacent moose populations to some extent. Because it is essentially an isolated moose population, we manage the Nunatak Bench moose population separately from moose populations in the remainder of Unit 5A. Because of the areas isolated nature and relatively low moose habitat capability, we have typically maximized hunting opportunity on the Nunatak Bench using an either sex hunt with a longer and later occurring season (November 15–February 15) in order to maintain the moose population at a level appropriate for the amount of available habitat. The either sex hunt strategy accommodates the timing of this hunt given that much of the hunt period occurs post antler drop making it difficult to differentiate between the sexes.

The Nunatak Bench strategic moose management plan calls for a post-hunt population of no more than 50 moose. During an aerial survey of the Nunatak Bench conducted in 2001, a total of 52 moose were observed, after which time the moose population declined. From 2005–2011 (no survey in 2010) the number of moose observed ranged from 11 to 14, with only 1 to 2 calves observed on any given flight. Due to the area’s remoteness, the limited availability of pilots and aircraft, and inclement winter weather, no aerial moose surveys have been conducted at Nunatak Bench since 2011. The observed decline in moose numbers may be due in part to the 68 foot rise in water level that flooded the area in 2003 when the advancing Hubbard Glacier created an ice dam that eventually gave way flooding and eliminating willow stands. Moose have the ability to emigrate from the area and may have abandoned Nunatak Bench due to the lack of available forage. Anecdotal reports from hunters suggest the presence of wolves may also have contributed to low moose numbers in the area.

From 1997–2004 an average of 12 either sex permits were issued annually, and on average only about four people actually hunt. During this period a total of 15 moose were harvested (9 bulls, 6 cows) for an average annual harvest of approximately 2 moose. No permits have been issued, and no moose have been harvested in the area since 2004.

As of our last survey in 2011, moose had yet to recolonize the Nunatak Bench, and it is unknown if moose numbers will increase sufficiently in the near-term to provide hunting opportunity. Although we do not believe the Nunatak Bench currently supports enough moose to allow for a sustainable harvest, the department would like to retain the ability to implement an antlerless hunt in the event the population increases to a level capable of providing a harvestable surplus. The department plans to conduct aerial surveys of the Nunatak Bench when conditions allow, and will allow a harvest when the survey counts reach or exceed 25 moose.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-C15-140)

PROPOSAL 115 - 5 AAC 085.045(a)(4). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose season in Unit 6C as follows:

Seasons and Bag Limits (4)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 6(C)		
1 moose by drawing permit only; up to 40 permits for bulls and up to 20 permits for antlerless moose may be issued	Sept. 1—Oct. 31 (General hunt only)	No open season.
or		
1 moose by registration permit only;	Nov. 1—Dec. 31 (General hunt only)	No open season.

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What is the issue you would like the board to address and why? The department recommends reauthorizing the state antlerless hunt as a back up to the federal subsistence hunt. Antlerless moose seasons must be reauthorized annually. The population objective is 400-500 moose. A population estimate completed during February 2014 yielded an estimate of 600 moose, 25% of which were calves. Because the available antlerless harvest quota in Unit 6C is currently harvested under a federal subsistence season administered by the U. S. Forest Service, we have not held the antlerless hunt since the 1999-2000 season. Continuation of the antlerless hunts will be necessary to restrain the growth of this population beyond what the habitat can support.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-141)

PROPOSAL 116 - 5 AAC 85.045(a)(5). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Units 7 and 14C as follows:

Units and Bag Limits (5)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 7, the Placer River drainages, and that portion of the Placer Creek (Bear Valley) drainage		

outside the Portage
Glacier Closed Area, and
that portion of Unit 14(C)
within the Twentymile
River drainage

RESIDENT HUNTERS:

1 moose by drawing permit only; up to 60 permits for bulls will be issued in combination with nonresident hunts, and up to 70 permits for antlerless moose will be issued

Aug. 20—Oct. 10
(General hunt only)

NONRESIDENT HUNTERS:

1 bull by drawing permit only; up to 60 permits for bulls will be issued in combination with resident hunts

Aug. 20—Oct. 10

...

What is the issue you would like the board to address and why? Antlerless moose seasons must be reauthorized annually. The harvest of antlerless moose provides the department with a management tool to maintain the number of moose in the Twentymile/Portage/Placer area at a population level low enough to reduce over-browsing of winter habitat, moose-vehicle collisions, and starvation during severe winters. The moose population will be healthier and more productive due to decreased stress levels associated with winter food shortages.

The moose population in the Twentymile/Portage/Placer area has a history of rapid increase following mild winters, and sharp reductions during severe winters. In 2009, antlerless permits were issued for the first time since 2004. Thirty antlerless permits (in addition to 40 bull permits) were issued for 2009, 2010, 2011 and 2014, and 20 antlerless permits (in addition to 25 bull permits) were issued for 2012 and 2013. Harvests for 2010, 2011, 2012, 2013, and 2014 were 15 bulls and 15 cows, 19 bulls and 8 cows, 12 bulls and 7 cows, 10 bulls and 7 cows and 17 bulls and 10 respectively. A November 2013 aerial composition count of moose in the Twentymile, Portage, and Placer river drainages found 155 moose with a bull:cow ratio of 23 bulls per 100 cows and a calf:cow ratio of 27 calves per 100 cows.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-142)

PROPOSAL 117 - 5 AAC 85.045(a)(12). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Unit 14C as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(12) ... Unit 14(C), Joint Base Elmendorf-Richardson (JBER) Management Area	Day after Labor Day —Mar 31 (General hunt only)	Day after Labor Day —Mar 31
1 moose by regulatory year by drawing permit, and by muzzleloading blackpowder rifle or bow and arrow only; up to 185 permits may be issued		
Unit 14(C), that portion known as the Birchwood Management Area	Day after Labor Day —Sept. 30 (General hunt only)	Day after Labor Day —Sept. 30
1 moose by drawing permit, by bow and arrow only; up to 25 permits may be issued		
Unit 14(C), that portion known as the Anchorage Management Area	Day after Labor Day —Nov. 30 (General hunt only)	No open season
1 antlerless moose by drawing permit only, and by bow and arrow, shotgun, or muzzleloader only; up to 50 permits may be issued		
Unit 14(C), that portion of the Ship Creek drainage upstream of the Joint Base Elmendorf-Richardson (JBER) Management Area		
1 moose by drawing permit only; up to 50 permits may be issued; or	Day after Labor Day —Sept. 30 (General hunt only)	Day after Labor Day —Sept. 30

1 bull by registration permit only	Oct. 1—Nov. 30 (General hunt only)	Oct. 1—Nov. 30
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...
Remainder of Unit 14(C)

1 moose per regulatory year, only as follows:

1 bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side; or	Day after Labor Day —Sept. 30 (General hunt only)	Day after Labor Day —Sept. 30
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1 antlerless moose by drawing permit only; up to 60 permits may be issued; or	Day after Labor Day —Sept. 30 (General hunt only)	No open season
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1 bull by drawing permit only, by bow and arrow only; up to 10 permits may be issued	Oct. 20—Nov. 15	No open season
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What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually. Adoption of this proposal is necessary for the hunts to continue. The harvest of antlerless moose provides the department with a management tool to maintain the number of moose in Unit 14C at the desired population objective (1500 moose). At this population level we have seen reductions in over-browsing of winter habitat, moose-vehicle collisions, moose-human conflicts in urban areas, and starvation during severe winters. At this level, the moose population will be healthier due to decreased stress levels associated with winter food shortages.

Moose in Unit 14C are managed intensively for a population objective of 1500–1800 moose and an annual harvest objective of 90–270 moose (5AAC 92.108). In 2013, we estimated a moose population of approximately 1533 moose in Unit 14C from a combination of population census, composition surveys and extrapolation to unsurveyed areas. At this population level, we have experienced a decline in human-moose conflicts and decreased winter mortalities. Harvesting cow moose is paramount to maintaining the population at the low end of the objective while providing harvest opportunity.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-143)

PROPOSAL 118 - 5 AAC 85.045(a)(13). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Unit 15C as follows:

Units and Bag Limits (13)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
<p>...</p> <p>Unit 15(C), that portion south of the south fork of the Anchor River and northwest of Kachemak Bay</p>		
<p>RESIDENT HUNTERS: 1 bull with spike or 50-inch antlers or antlers with 4 or more brow tines on one side; or</p>	<p>Sept. 1—Sept. 25 (General hunt only)</p>	
<p>1 antlerless moose by drawing permit only; the taking of calves, and females accompanied by calves, is prohibited; up to 100 permits may be issued in combination with the nonresident drawing hunt; or</p>	<p>Oct. 20—Nov. 20</p>	
<p>1 moose by targeted permit only,</p>	<p>Oct. 15—Mar. 31</p>	
<p>NONRESIDENT HUNTERS: 1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side; or</p>		<p>Sept. 1—Sept. 25</p>
<p>1 antlerless moose by drawing permit only; the taking of calves, and females accompanied by calves, is prohibited; up to 100 permits may be issued in combination with the resident drawing hunt</p>		<p>Oct. 20—Nov. 20</p>
<p>Remainder of Unit 15(C)</p>		

RESIDENT HUNTERS:

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

Sept. 1—Sept. 25
(General hunt only)

1 moose by targeted permit only,

Oct. 15—Mar. 31

NONRESIDENT HUNTERS:

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

Sept. 1—Sept. 25

...

What is the issue you would like the board to address and why? Antlerless moose seasons must be reauthorized annually. This hunt was developed at the March 2015 Board of Game meeting. The purpose of this hunt is to allow for the harvest of cow and calf moose along the Sterling Highway in Unit 15C during the winter months if they pose a threat to highway vehicles. The department will decide when and where permits will be issued during the hunt period. The hunt is administered through a registration permit and up to 100 moose may be taken. The number of permits issue each year will depend on conditions and it is possible no permits will be issued some years.

In February 2013, moose population estimate for Unit 15C was 2554-3855 (95% CI) which is well within the Intensive Management population objective (2500–3500). During recent years calf:cow ratios in areas surveyed in Unit 15C have increased since 2012 (15 calves:100 cows in 2012, 26 calves:100 cows in 2013, and 31 calves:100 cows in 2014). The department recommends taking these moose that would have had a high likelihood of being hit by vehicles if not harvested. We recommend reauthorization of the hunt.

The Homer benchland in Unit 15C often holds high moose densities in winters when deep snow pushes the moose down into human populated areas. Even without deep snow, moose die due to malnutrition and negative interactions with humans occur as moose become more aggressive in their search for food around human residences.

In February 2013, 1218 moose were counted during a population survey in the northern portion of unit 15C, of which 13.7% were calves (19 calves:100 cows). November 2013 composition counts for the area affected by this hunt provided ratios of 19 bulls:100 cows and 44 calves:100 cows. This area was not surveyed in 2014 due to lack of snow, however, calf:cow ratios in other areas surveyed in 15C have increased since 2012 (15 calves:100 cows in 2012, 23 calves:100 cows in 2013, and 31 calves:100 cows in 2014). Fifty permits were issued in each year since 2002 resulting in an average harvest of 22 cows per year. We recommend reauthorization of the antlerless hunt.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-C15-144)

PROPOSAL 119 - 5 AAC 85.045(a)(11). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Unit 13 as follows:

Units and Bag Limits (11)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 13 1 moose per regulatory year, only as follows:		
...		
1 antlerless moose by drawing permit only; up to 200 permits may be issued; a person may not take a calf or a cow accompanied by a calf	Oct. 1—Oct. 31 Mar. 1—Mar. 31 (General hunt only)	No open season
...		

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually by the board. The current regulation allows hunters to take a limited number of cows in specific areas to keep the population within objectives.

This Unit 13 antlerless hunt was initially adopted in March 2011, and the first Unit 13 antlerless hunt under this regulation took place in September 2012. The hunt was modified when the Board of Game adopted an October and March season during the February 2013 board meeting.

Since the inception of this hunt, the department has issued 10 permits annually for a hunt in Unit 13A. The department intentionally limited the number of permits issued annually to gain public support for the hunt, even though a higher rate of cow harvest was desirable from to regulate the moose population within objectives. After considering a proposal during the 2015 Board of Game meeting, which was submitted by the public to increase the number of cow permits issued annually, the board directed the department to issue a sufficient number of permits to allow the harvest of up to one percent of the cow population, when the moose population is above the midpoint of the population objective for the subunit.

Moose in Unit 13 have generally increased at a rate of 3–5% per year in the intensive wolf management area during the past 10 years. The current population objective for Unit 13A is 3,500–4,200, and the population was estimated to include 4,020 in 2013. The number of cows in western Unit 13A is expected to continue increasing, and the antlerless hunt in western Unit 13A is necessary to slow the growth of this population and to keep it within the intensive management objectives. The additional harvest provided by the hunt will also assist in achieving the harvest

objectives for the population. No additional antlerless opportunities in other portions of Unit 13 are recommended at this time.

If this antlerless moose hunting opportunity is not reauthorized in Unit 13, the intensive management program and objectives will likely need to be restructured to maintain the moose population within a population size range that does not result in nutritional limitations for the moose and to achieve the harvest objectives recommended by the public, advisory committees, and the board.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-145)

PROPOSAL 120 - 5 AAC 84.045(a)(12). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Units 14A and 14B as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(12)		
Unit 14(A) 1 moose per regulatory year, only as follows:		
...		
1 antlerless moose by drawing permit only; up to 1000 antlerless moose permits may be issued	Aug. 20—Sept. 25 (General hunt only) Nov. 1—Dec. 15 (General hunt only)	No open season
...		
1 moose by targeted permit only; and by shotgun or archery only; up to 200 permits may be issued	Winter season to be announced (General hunt only)	No open season
Unit 14(B)		
1 moose per regulatory year, only as follows:		
...		
1 moose by targeted permit only; and by shotgun or archery only; up to 100	Winter season to be announced (General hunt only)	No open season

permits may be issued

...

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually by the board. There are two types of antlerless moose hunts in the Mat-Su Valley, a drawing permit hunt used to regulate growth of the moose population in Unit 14A and targeted hunts used to mitigate public safety concerns in Units 14A and 14B.

Moose surveys conducted in November 2013 resulted in an estimate of 8,500 moose in Unit 14A with a bull ratio of 21 bulls:100 cows and a calf ratio of 45 calves:100 cows. This estimate was greater than the post-hunt objective of 6,000–6,500 moose and greater than the 2011 survey estimate of 8,000 moose.

Based on current projections, the Unit 14A moose population is expected to grow and continue to exceed population objectives. If the density of moose is allowed to increase, we anticipate an increase the number of moose-human conflicts, and moose may experience nutritional stress as the population nears carrying capacity. Cow harvests are warranted to control the moose population’s growth and recommended as a way to provide additional moose hunting opportunity in the Mat-Su Valley.

The targeted moose hunts in Units 14A and 14B are an effective tool to address public safety concerns related to moose-vehicle collision and nuisance management issues. Moose-vehicle collisions result in property damage and may result in human injury or death. An average of 266 moose per year were killed in the Mat-Su Valley area during the last few years of average snowfall and substantially more were killed during higher snowfall years. ADF&G also receives periodic complaints from the public about crop depredation and aggressive behavior that can be mitigated by this hunt structure.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-146)

PROPOSAL 121 - 5 AAC 085.045(a)(14). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose season on Kalgin Island in Unit 16B as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(14)		
Unit 16(B), Kalgin Island 1 moose per regulatory year, by registration permit only	Aug. 20—Sept. 20	Aug. 20—Sept. 20

...

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually by the board. The current regulation for hunting moose on Kalgin Island in Unit 16B allows hunters to antlerless moose with the goal of reducing the population to the management objective.

In response to concerns that the moose population on Kalgin Island had exceeded the island's carrying capacity and due to deteriorating habitat conditions, the board established a drawing permit hunt for antlerless moose in 1995. In a further attempt to reduce the number of moose on the island, the board established a registration hunt for any moose in 1999. Despite these measures to reduce moose numbers, moose remain abundant on the island and continue to exceed the management objective.

During the most recent moose survey, department staff counted 104 moose on Kalgin Island in December 2012. This count exceeded the population objective of 20–40 moose.

The "any moose" registration hunt is recommended to provide additional mortality on this predator-free island population. A registration hunt also allows the department to continue gathering biological information from specimens provided by successful hunters. The difficult hunting conditions and limited access will minimize the danger of over-harvest.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-147)

PROPOSAL 122 - 5 AAC 85.045(a)(15). Hunting Seasons and Bag Limits for Moose.
 Reauthorize the antlerless moose season in Unit 17A as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
<p>(15)</p> <p>Unit 17(A)</p> <p>Up to 2 moose per regulatory year only as follows:</p> <p>RESIDENT HUNTERS: 1 bull by registration permit only; or</p> <p>1 antlered bull by registration permit; during the period Dec. 1 – Last day of Feb. a season of up to 31 days may be announced</p>	<p>Aug. 25—Sept. 20 (Subsistence hunt only)</p> <p>Winter Season to be Announced by Emergency Order (Subsistence hunt only)</p>	

by emergency order; or

1 antlerless moose by registration permit; during the period Dec. 1 –Last day of Feb. a season of up to 31 days may be announced by emergency order;

Winter Season to be Announced by Emergency Order (Subsistence hunt only)

...

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually by the board. The board adopted an antlerless moose hunt in Unit 17A in support of the Unit 17A Moose Management Plan, which was modified during a meeting of the Unit 17A Moose Management Planning Group in December 2012. The planning group consists of entities interested in the management of this moose population and includes representatives from the Bristol Bay Federal Subsistence Regional Advisory Council, the Nushagak and Togiak Fish and Game Advisory Committees, the Togiak National Wildlife Refuge, and the ADF&G Unit 17 management office.

According to the third goal of the revised Unit 17A Moose Management plan, antlerless moose hunting opportunity can be offered when the population is above 600 moose and increasing. The revised plan also recommends that a bag limit of up to two moose when the population exceeds 1,200 moose.

Based on the most recent surveys, there were 1,166 moose in Unit 17A during March 2011. Since then the reproductive indices from a sample of radio collared animals indicates this herd is still growing and is probably above 1,200 moose. The bag limit of two moose and antlerless harvest opportunity provides a mechanism to limit population growth and allows hunters to harvest surplus animals.

The moose population in subunit 17A is growing and can sustain additional harvest; however, the objectives for this population include allowing it to expand into neighboring areas as well as provide for additional harvest opportunity. The population is currently contributing to the growth of moose populations, especially to the north and west.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-148)

PROPOSAL 123 - 5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.
Reauthorize the antlerless moose seasons in Unit 20A as follows:

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

Unit 20(A), the
Ferry Trail
Management Area,
Wood River
Controlled Use
Area, and the
Yanert Controlled
Use Area

RESIDENT HUNTERS:

1 bull with spike-fork
antlers or 50-inch
antlers or antlers
with 4 or more brow
tines on one side; or

Sept. 1—Sept. 25
(General hunt only)

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
(General hunt only)

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

Oct. 1—Feb. 28
(General hunt only)

1 bull by drawing permit
only; up to 1,000 permits
may be issued in combi-
nation with the Remainder
of Unit 20(A); or

Sept. 1—Sept. 25
(General hunt only)

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

Nov. 1—Nov. 30
(General hunt only)

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

Season to be announced by emergency order (General hunt only)

NONRESIDENT HUNTERS:

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

Sept. 1—Sept. 25

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);

Nov. 1—Nov. 30

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

Sept. 1—Sept. 25

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

Aug. 15—Nov. 15 (General hunt only)

by a calf; or

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

Aug. 25—Feb. 28

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

Sept. 1—Sept. 25

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

Season to be announced by emergency order (General hunt only)

NONRESIDENT HUNTERS:

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

Sept. 1—Sept. 25

...

What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. The purpose of antlerless moose hunts in Unit 20A is to regulate population growth, to meet the Intensive Management (IM) mandate for high levels of harvest, to provide subsistence hunters with a reasonable opportunity for success in obtaining moose for subsistence uses in Unit 20A outside the Fairbanks Nonsubsistence Area (part of the western Tanana Flats), and to use the targeted hunt as a tool to manage moose-vehicle collision and nuisance situations. Overall, the goal is to protect the health and habitat of the moose population over the long term and to provide for a wide range of public uses and benefits.

This reauthorization will allow the department to manage the moose population at the optimum level (i.e., in concert with the available habitat). Additional hunting opportunity will be provided and harvest will remain as high by utilizing a harvestable surplus of antlerless moose. The antlerless harvest will help in meeting IM harvest objectives without reducing bull-to-cow ratios to low levels. Meat and subsistence hunters will benefit from the opportunity to harvest cow

moose. The moose populations will benefit by having moose density compatible with the 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 12,000–15,000 moose (the IM population objective adopted by the board in 2012). The Unit 20A population was estimated at 8,678–11,633 moose (90% confidence interval) in 2013. As a result, the antlerless hunts were suspended during RY14. Additionally, because the department was unable to conduct a population estimate in 2014 due to poor survey conditions, the antlerless hunts will also be suspended in RY15. However, this high-density moose population continues to experience density-dependent effects, including low productivity and relatively light calf weights. The department plans to conduct a population estimate in 2015 and, if the population estimate exceeds 12,000 moose, the antlerless hunts may need to be reinstated in RY16 to regulate population growth.

If antlerless moose hunts are not reauthorized, the department will lose the ability to regulate this moose population. Opportunity to hunt a harvestable surplus of cow moose will be lost, and our ability to meet IM 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.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-150)

PROPOSAL 124 - 5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Unit 20B as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(18)		
...		
Unit 20(B), that portion within Creamer’s refuge		
1 bull with spike-fork or greater antlers, by bow and arrow only; or	Sept. 1—Sept. 30 (General hunt only) Nov. 21—Nov. 27 (General hunt only)	Sept. 1—Sept. 30 Nov. 21—Nov. 27
1 antlerless moose by bow and arrow only, by	Sept. 1—Nov. 27 (General hunt only)	Sept. 1—Nov. 27

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 muzzleloader 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

1 moose by targeted permit only; by shotgun or

Dec. 1—Jan. 31
(General hunt only)

Sept. 1—Sept. 30
(General hunt only)
Nov. 21—Nov. 27
(General hunt only)

Sept. 1—Nov. 27
(General hunt only)

Season to be announced
by emergency order

Dec. 1—Jan. 31

Sept. 1—Sept. 30
Nov. 21—Nov. 27

Sept. 1—Nov. 27

No open season.

bow and arrow only; up to 100 permits may be issued

(General hunt only)

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

RESIDENT HUNTERS:

1 bull; or

Aug. 21—Aug. 27
(Subsistence hunt only)

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

Sept. 8—Sept. 25

1 antlerless moose by registration permit only

Oct. 15—Feb. 28
(Subsistence hunt 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

Sept. 8—Sept. 25

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 a cow accompanied by a calf; or

Aug. 15—Nov. 15
(General hunt only)

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

Oct. 1—Feb. 28
(General hunt only)

No open season.

by a calf; or		
1 bull; or	Sept. 1—Sept. 25	Sept. 1—Sept. 25
1 bull, by bow and arrow only; or	Sept. 26—Sept. 30	Sept. 26—Sept. 30
1 bull by drawing permit only; by muzzleloader only; up to 60 permits may be issued in combination with the hunt in the Salcha River drainage upstream from and including Goose Creek, and the hunt in the Salcha River drainage downstream of Goose Creek and upstream from and including Butte Creek; or	Nov. 10—Dec. 10 (General hunt only)	No open season.
beginning July 1, 2015, 1 bull by registration permit only; by muzzleloader only, in the Salcha River drainage upstream from and including Butte Creek	Nov. 10—Dec. 10 (General hunt only)	No open season.
Unit 20(B), that portion of the Salcha River drainage upstream from and including Goose Creek		
1 bull; or	Sept. 1—Sept. 25	Sept. 1—Sept. 25
1 bull, by bow and arrow only;	Sept. 26—Sept. 30	Sept. 26—Sept. 30
1 bull by drawing permit only; by muzzleloader only; up to 60 permits may be issued in combination with the hunt in the Middle Fork of the Chena River, and the	Nov. 10—Dec. 10 (General hunt only)	No open season.

hunt in the Salcha River drainage downstream of Goose Creek and upstream from and including Butte Creek; or

beginning July 1, 2015, 1 bull by registration permit only; by muzzleloader only, in the Salcha River drainage downstream of Goose Creek and upstream from and including Butte Creek;

Nov. 10—Dec. 10
(General hunt only)

No open season.

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

1 bull; or

Sept. 1—Sept. 20

Sept. 5—Sept. 20

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

Aug. 15—Nov. 15
(General hunt only)

No open season.

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

Oct. 1—Feb. 28
(General hunt only)

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

Season to be announced by emergency order
(General hunt only)

No open season.

1 bull by drawing permit only; by

Nov. 10—Dec. 10
(General hunt only)

No open season.

muzzleloader only; up to 60 permits may be issued in combination with the hunt in the drainage of the Middle Fork of the Chena River and the hunt in the Salcha River drainage upstream from and including Goose Creek; or

beginning July 1, 2015, 1 bull by registration permit only; by muzzleloader only, in the drainage of the Middle Fork of the Chena River and in the Salcha River drainage upstream from and including Goose Creek;

Nov. 10—Dec. 10
(General hunt only)

No open season.

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

1 bull; or

Sept. 1—Sept. 20

Sept. 5—Sept. 20

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

Sept. 16—Feb. 28
(General hunt only)

No open season.

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

Season to be announced by emergency order
(General hunt only)

No open season.

Remainder of Unit 20(B)

1 antlerless moose by drawing permit only; by youth hunt only; up

Aug. 5—Aug. 14

No open season.

to 200 permits may be issued;
or

1 bull; or	Sept. 1—Sept. 20	Sept. 5—Sept. 20
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	Aug. 15—Nov. 15 (General hunt only)	No open season.
1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or	Oct. 1—Feb. 28 (General hunt only)	
1 moose by targeted permit only; by shotgun or bow and arrow only; up to 100 permits may be issued	Season to be announced by emergency order (General hunt only)	No open season.
...		

What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. Our goal in Unit 20B 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 are available and analyzed. Opportunity to hunt a harvestable surplus of cow moose will be lost, and our ability to meet IM harvest objectives will be compromised. Subsistence hunters in the portion of Unit 20B outside the Fairbanks Nonsubsistence Area 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 the department to manage these moose populations at optimum levels. The additional harvest will help in meeting IM harvest objectives. It will also allow hunters to harvest

moose toward meeting the IM 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.

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 is high and poses 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 to reduce moose–vehicle collisions, the department incrementally increased the number of drawing permits for antlerless moose in the FMA during RY99–RY10. Moose–vehicle collisions and moose nuisance problems declined during RY06–RY14, presumably, in part due to the consistent antlerless moose harvests during RY09–RY14.

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 the 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 sustainable density in the MFMA (2013 = 2.6 moose/mi²). Therefore, to stabilize this population, the antlerless harvest has been reduced to about 1% of the total population to maintain the current population size.

Targeted Hunt – The purpose of the targeted hunt is to allow the public to harvest moose that are causing a nuisance or public safety issue. These permits are used sparingly but allow the public to harvest the moose instead of the department just dispatching them.

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 goal will be approximately 1% of the total population to maintain the level of the population estimate.

To mitigate hunter conflicts, we spread hunters out over space and time. Each of 16 hunt areas has permits in four time periods: two before the general hunt, one during, and one after. The earliest of the four hunts is a youth hunt that gives hunting opportunity prior to the start of school. Spreading these hunts out over time maintains a few hunters during each season in each permit area, yet is expected to achieve a harvest of approximately 100 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.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-151)

PROPOSAL 125 - 5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose seasons in Unit 20D as follows:

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

RESIDENT HUNTERS:

1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side; or	Sept. 1—Sept. 15 (General hunt only)
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1 bull by drawing permit; or	Sept. 1—Sept. 15 (General hunt only)
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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	Oct. 10—Nov. 25 (General hunt only)
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take a calf or a cow
accompanied by a calf; or

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 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
Controlled Use 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 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
(General hunt only)

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
(General hunt only)

1 bull with spike-fork or
50-inch antlers or antlers
with 4 or more brow tines on
one side by drawing permit
only; up to 30 permits may be
issued; 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

1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side by drawing permit only; up to 30 permits may be issued

Sept. 1—Sept. 15

...

What is the issue you would like the board to address and why? The Board of Game must annually reauthorize antlerless moose hunting seasons in Unit 20D. 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 and help to meet Intensive Management (IM) objectives for high levels of harvest.

The goals of the Unit 20D antlerless moose hunts are to stabilize population growth and to address concerns about range degradation, reduced nutritional condition, and reduced reproductive success, as well as to provide youth and disabled veteran hunting opportunity. Most of these goals are being 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 nine-month-old calves increased from 340 lbs. in 2010 to 366 lbs. in 2012 (K. Seaton, ADF&G, unpublished data, Fairbanks).

The Unit 20D moose population has great potential for growth due to the extensive agricultural land and burns and high predator harvest. If antlerless moose hunts are not reauthorized, the moose population may increase to unacceptable levels or may need reduction when new data are available and analyzed. Opportunity to hunt a harvestable surplus of cow moose will be lost, and our ability to meet IM harvest objectives will be compromised.

Reauthorization of Unit 20D 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 the department to manage these moose populations at optimum levels. The additional harvest will help in meeting IM harvest objectives without reducing bull-to-cow ratios to low levels. Meat hunters may 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.

With the exception of the Bison Range Controlled Use Area, 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 moose. These 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. During the 2015 season we have no plans to issue permits for antlerless moose hunting in Unit 20D, except for a total of 16 permits for which antlerless moose (except a cow accompanied by a calf or a calf) are part of the legal bag limit in the Bison Range Controlled Use Area and the Disabled Veteran moose hunts.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-152)

PROPOSAL 126 - 5 AAC 85.045(a)(16). Hunting seasons and bag limits for moose.
Reauthorize the antlerless moose season in the Remainder of Unit 18 as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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(16)

...

Remainder of Unit 18

RESIDENT HUNTERS:

2 moose; of which only 1 may be an antlered bull; a person may not take a calf or a cow accompanied by a calf; or	Aug. 1—Sept. 30
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2 antlerless moose; or	Oct. 1—Nov. 30.
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2 moose	Dec. 1—Mar. 15
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NONRESIDENT HUNTERS:

1 antlered bull	Sept. 1—Sept. 30
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...

What is the issue you would like the board to address and why? To be retained, the antlerless moose seasons in the Remainder of Unit 18 must be reauthorized annually. The current antlerless hunts were adopted at the January 2014 Board of Game meeting in Kotzebue and were reauthorized for RY2015 at the February 2015 Board of Game meeting in Wasilla. This proposal requests reauthorization for RY2016.

Implementation of antlerless hunts began in 2007 and has continued each year due to increased moose abundance, productivity, and population growth along the Yukon River drainage in Unit 18. Based on the steady growth in moose populations and productivity, ADF&G proposes continued antlerless moose hunts in the Remainder of Unit 18.

Within the areas near the Yukon River, the moose population is estimated at a minimum of 12,000 animals with calf:cow ratios ranging from 37:100 to 69:100, and twinning rates close to 50% for all areas. Population growth continues to be strong in this portion of Unit 18 and anecdotal evidence suggests that calf survival rates remain high. The population is expected to continue to grow as animals move into under-utilized habitat.

Although the current year harvest data in the Remainder of Unit 18 has not been finalized due to the early proposal deadline, we expect harvest to be similar to the past 3 years and well within sustained yield for this robust population. Allowing antlerless harvest will benefit hunters through increased opportunity, and any increases in harvest may help slow the growth rate of the population in this portion of Unit 18.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-154)

PROPOSAL 127 - 5 AAC 85.045(a)(21). Hunting seasons and bag limits for moose.
 Reauthorize the antlerless moose season in Unit 23 as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(21)		
Unit 23, that portion north of and including the Singoalik River drainage		
RESIDENT HUNTERS:		
1 moose by registration permit only; however, antlerless moose may be taken only from Nov. 1–Dec. 31; a person may not take a calf or a cow accompanied by a calf; or	July 1—Dec. 31	
1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side	Sept. 1—Sept. 20	
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 125 permits may be issued in all of Unit 23		Sept. 1—Sept. 20
Remainder of Unit 23		
RESIDENT HUNTERS:		
1 moose by registration permit only; however, antlerless moose may be taken only from Nov. 1 - Dec. 31; a person may not take a calf or a cow accompanied by a calf; or	Aug. 1—Dec. 31	
1 bull with 50-inch antlers	Sept. 1—Sept. 20	

or antlers with 4 or more
brow tines on one side

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 125 permits
may be issued in all of Unit 23

Sept. 1—Sept. 20

What is the issue you would like the board to address and why? To be retained, antlerless moose seasons must be reauthorized annually. Moose abundance in Unit 23 has a long period and pattern of low density in large portions of Unit 23. As a result, in November 2003 the Board of Game restricted moose hunting for resident and nonresident hunters. These restrictions substantially shortened the resident antlerless moose season and limited the harvest of antlerless moose to hunters who register for registration permit hunt RM880. The resident registration hunt was implemented as a way to retain antlerless opportunity through substantially shortened seasons that limited antlerless harvest to the months of November and December. Since RY2004 there have been no further changes to moose hunting seasons in Unit 23 and antlerless seasons have been reauthorized annually.

Historically, the reported harvest of antlerless (cow) moose has been low throughout Unit 23 despite liberal antlerless seasons. We do not think maintaining an antlerless season during November and December, when moose harvests tend to be very low, will cause overharvest of the cow portion of the Unit 23 moose populations.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-155)

PROPOSAL 128 - 5 AAC 85.045(a)(24). Hunting seasons and bag limits for moose.
Reauthorize the antlerless moose season in the western portion of Unit 26A as follows:

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

(24)

...

Unit 26(A), that portion west of
156° 00' W. longitude and
excluding the Colville River
drainage.

1 moose; a person may

July 1—Sept. 14

No open season.

not take a calf or a cow
accompanied by a calf

...

What is the issue you would like the board to address and why? To be retained, the antlerless moose season in the portion of Unit 26A west of 156° 00' W longitude and excluding the Colville drainage must be reauthorized annually.

The western portion of Unit 26A north of the Colville drainage is somewhat unique in relation to the presence of moose and the unit-wide population. The distribution in this area is very sparse due to minimal habitat in the coastal plain to attract moose. However, each year a small number of bulls and barren cows arrive in this area as they disperse away from the major river drainages in the central and southern parts of the unit. So far, the marginal habitat in this portion of Unit 26A has not allowed moose to colonize or become established in this area. The only moose found in this area appear to have originated from distant locations as they exhibit seasonal movements. The low numbers of moose that disperse to this hunt area provide the only opportunities for harvest in the northwestern portion of Unit 26A.

Even though the Unit 26A moose population is currently low and has experienced a substantial decline since 2011, the number of dispersing cow moose that could be harvested under the proposed antlerless reauthorization is very small and will have very little impact on the size and status of the Unit 26A population. To date, after several years of hunting opportunity in this area, two antlerless moose have been harvested: one cow in 2006, and one in 2008. Due to low harvest rates, we recommend reauthorization of the antlerless moose season in this area.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-156)

PROPOSAL 129 - 5 AAC 92.015. Brown bear tag fee exemption. Reauthorize the brown bear tag fee exemptions for the Central/Southwest Region as follows:

5AAC 92.015. Brown bear tag fee exemption

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

- (1) Unit 11;
- (2) Units 13 and 16(A);
- (3) Unit 16(B) and 17;

...

(11) Unit 9, within the following areas, unless a smaller area is defined by the department in an applicable permit:

(A) Unit 9(B), within five miles of the communities of Port Alsworth, Nondalton, Iliamna, Newhalen, Pile Bay, Pedro Bay, Pope Vanoy Landing, Kakhonak, Igiugig, and Levelock;

(B) Unit 9(C), within five miles of the communities of King Salmon, Naknek, and South Naknek;

(C) Unit 9(D), within five miles of the communities of Cold Bay, King Cove, Sand Point, and Nelson Lagoon;

(D) Unit 9(E), within five miles of the communities of Egegik, Pilot Point, Ugashik, Port Heiden, Port Moller, Chignik Lake, Chignik Lagoon, Chignik Bay, Perryville, and Ivanof Bay;

(12) Unit 10, within three miles of the community of False Pass, unless a smaller area is defined by the department in an applicable permit.

(b) In addition to the units as specified in (a) of this section, if a hunter obtains a subsistence registration permit before hunting, that hunter is not required to obtain a resident tag to take a brown bear in the following units:

(1) Unit 9(B);

(2) Unit 9(E), that portion including all drainages that drain into the Pacific Ocean between Cape Kumliun and the border of Unit 9(D) and Unit 9(E);

(3) Unit 17;

...

What is the issue you would like the board to address and why? Brown bear tag fee exemptions must be reauthorized annually or the fee will be automatically reinstated.

General Season Hunts: The board liberalized brown bear hunting regulations including the tag fee exemption to increase the harvest of brown bears in Units 11, 13, and 16 during the March 2003 Board of Game meeting and in Unit 17 during the March 2011 Board of Game meeting. The tag fee exemption in these units provides greater opportunity to harvest of brown bears by allowing opportunistic.

The board also exempted brown bear tag fees for bear hunts near communities in Unit 9 to address public safety concerns in communities during the board meeting in March 2011. Brown bears are abundant in Unit 9 and are managed as a trophy species. Brown bears are frequently observed in communities where they destroy property in search of food or garbage and occasionally kill pets. The liberalized bear seasons and bag limits adopted along with the elimination of the tag fee were intended to allow people to take bears before they destroy property, to promote a greater acceptance of the unit's bear population, and to resolve some of the compliance issues associated with the take of bears in defense of life or property.

Subsistence Brown Bear Hunts: The board waived the brown bear tag fee requirement for subsistence brown bear hunts in Unit 17 and portions of Unit 9. Subsistence brown bear harvest rates are low and well within sustainable limits. Exempting the resident tag fee has not caused an increase in subsistence harvest in these units. Continuation of the exemption accommodates cultural and traditional uses of brown bears in these units and provides an alternative for hunters who take brown bears primarily for their meat.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-149)

PROPOSAL 130 - 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 of Game 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%, 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 (HQ-C15-153)

PROPOSAL 131 - 5 AAC 92.015. Brown bear tag fee exemptions. Reauthorize the current resident tag fee exemptions for brown bear in Units 18, 22, 23 and 26A as follows:

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

...

(4) Units... 26;

...

(8) Unit 22;

(9) Unit 23;

...
(13) Unit 18;
...

(b) In addition to the units as specified in (a) of this section, if a hunter obtains a subsistence registration permit before hunting, that hunter is not required to obtain a resident tag to take a brown bear in the following units:

...
(4) Unit 18;
...
(7) Unit 22;
(8) Unit 23;
...
(10) Unit 26(A).

What is the issue you would like the board to address and why? The Board of Game must reauthorize brown bear tag fee exemptions annually or the fee automatically becomes reinstated. We recommend continuing resident tag fee exemptions for the general season and subsistence season hunts in Region V (Units 18, 22, 23, and 26A).

General Season Hunts: Reauthorizations are needed for: Unit 18, where the tag fee has been exempted for 4 years; Unit 22, where the tag fee has been exempted for 14 years; Unit 23, where the tag fee has been exempted for nine years; and Unit 26A, where the tag fee has been exempted for four years. Tag fee exemptions are desired to allow: 1) incremental increase in annual harvest, 2) opportunistic harvest by resident hunters, and 3) harvest by a wide range of users. Increased harvest is allowable because portions of these units have high bear populations.

General season brown bear harvest rates are within sustained yield limits and previous exemptions of the resident tag fee have not caused dramatic or unexpected increases in overall harvest. In Units 18 and 26A, tag exemptions were authorized for RY2012 and harvest has remained within sustained yield and continues to be similar to the preceding ten-year period. In Unit 22, the 14-year tag-free period for residents has had an average annual harvest of 50 brown bears (range 41–63 bears). In Unit 23, general harvests have been increasing slowly since 1961 primarily in response to increases in human population rather than regulatory changes, although harvests are annually quite variable due to effects of weather on hunting conditions. Harvest data for Unit 23 show no trend in the sex ratio, age or size of bears harvested under all types of hunts.

Subsistence Season Hunts: Reauthorizations are needed for Units 18, 22, 23, and 26A where brown bear subsistence hunt requirements include: 1) registration permit, 2) tag fee exemption, 3) salvaging meat for human consumption, 4) no use of aircraft in Units 22, 23 and 26A, 5) no sealing requirement unless hide and skull are removed from subsistence hunt area, and 6) if sealing is required, the skin of the head and front claws must be removed and retained by ADF&G at the time of sealing. Continuing the tag fee exemption helps facilitate participation in the associated brown bear harvest programs maintained by ADF&G for subsistence hunts.

In all units, subsistence brown bear harvest rates are low and well within sustained yield limits and exempting the resident tag fee has not caused an increase in subsistence harvest. In Unit 18, we estimate 1–3 bears are taken annually in subsistence hunts. In Unit 22, subsistence harvest by permit is quite low, averaging less than one bear per year (less than 1% of the total brown bear harvest). In Unit 23, subsistence permit harvest is less than five bears annually since 1992 (less than 10% of the total brown bear harvest). In Unit 26A, between one and five bears are taken annually by subsistence hunters.

PROPOSED BY: Alaska Department of Fish and Game (HQ-C15-157)
