

The following proposals are scheduled for consideration at the March 18, 2021 Board of Game meeting. Proposals are in “roadmap” order which is the tentative order they will be considered during the meeting.

Note: Proposal 194 was accepted by the Board of Game as an Agenda Change Request for consideration at the Central/Southwest Region meeting originally scheduled for January 2021. Because the board meeting was postponed to January 2022 due to the COVID-19 pandemic, the board scheduled action on this proposal at a special meeting on March 18, 2021.

PROPOSAL 194

5 AAC 92.170. Sealing of marten, fisher, lynx, beaver, otter, wolf, and wolverine.

Establish a requirement for all wolves taken in Unit 2 to be sealed within 7 days of harvest as follows:

Wolves taken during either the hunting season or during the trapping season must be sealed within 7 days of take.

What is the issue you would like the board to address and why? In 2019 the Department of Fish and Game (department) proposed the board eliminate the 14-day sealing requirement for wolves harvested in Unit 2, resulting in the sealing requirements for Unit 2 wolves to revert to within 30 days of harvest under a hunting license and within 30 days of the close of the season under a trapping license. Since that change the department has determined the short sealing period had enabled the department to estimate the number of wolves more accurately in Unit 2. Accurate population estimates are key to setting annual season length and maintaining the population within the objective range for this contentious population. The population objective for wolves in Unit 2 is 150-200 wolves.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-ACR5)

Note: Proposal 195 was accepted by the Board of Game as an Agenda Change Request for consideration at the Central/Southwest Region meeting originally scheduled for January 2021, and postponed to January 2022 due to the COVID-19 pandemic.

PROPOSAL 195

5 AAC 85.050. Hunting seasons and bag limits for moose.

Align seasons and bag limits for moose in a portion of Unit 15B as follows:

5 AAC 85.045(a)(13)(B) is amended to read:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(13)		
...		
[UNIT 15(B), THAT PORTION BOUNDED BY A LINE RUNNING FROM THE MOUTH OF SHANTA-TALIK CREEK, TUSTUMENA LAKE, NORTHEASTWARD TO THE HEAD OF THE WESTERNMOST FORK OF FUNNY RIVER; THEN DOWNSTREAM ALONG THE WESTERNMOST FORK OF FUNNY RIVER TO THE KENAI NATIONAL WILDLIFE REFUGE BOUNDARY; THEN EAST ALONG THE REFUGE BOUNDARY TO ITS JUNCTION WITH THE KENAI RIVER; THEN EASTWARD ALONG THE SOUTH SIDE OF THE KENAI RIVER AND SKILAK LAKE; THEN SOUTH ALONG THE WESTERN SIDE OF SKILAK RIVER, SKILAK GLACIER, AND HARDING ICEFIELD; THEN WEST ALONG THE UNIT 15(B) BOUNDARY TO THE MOUTH OF SHANTATALIK CREEK	SEPT. 1 - SEPT. 20 (GENERAL HUNT ONLY)	SEPT. 1 - SEPT. 20
1 BULL WITH 50-INCH ANTLERS OR ANTLERS WITH 3 OR MORE BROW TINES ON ONE SIDE; OR		
1 BULL BY DRAWING PERMIT ONLY;]	SEPT. 1 - SEPT. 25	NO OPEN SEASON.

Unit 15(B), Kalgin Island 1 moose per regulatory year, by registration permit only	Aug. 20 - Sept. 20	Aug. 20 - Sept. 20
Remainder of Unit 15(B) 1 bull per regulatory year, only as follows: 1 bull with spike or 50-inch antlers or antlers with 3 or more brow tines on one side, by bow and arrow only; or	Aug. 22 - Aug. 29 (General hunt only)	Aug. 22 - Aug. 29
1 bull with spike or 50-inch antlers or antlers with 3 or more brow tines on one side; or	Sept. 1 - Sept. 25 (General hunt only)	Sept. 1 - Sept. 25
1 bull by drawing permit only;	Sept. 1 - Sept. 25	No open season.

What is the issue you would like the board to address and why? The current regulations in Unit 15B, adopted in March 2019, are confusing to the hunting public because of the differences in season dates and legal animals, which results in lost opportunity. When the existing regulations were passed to remove the drawing permit and institute general season harvest ticket hunts across Unit 15B and align regulations in the previous permit areas with the rest of Unit 15B three unintentional discrepancies occurred. No bow season was established in the old permit area to match the current season dates already present in the remainder of Unit 15B; spike antlered bull moose were not listed as an animal legal for harvest; and the general season dates in the old permit area remained five days shorter than the general season throughout the rest of Unit 15. If this problem is not addressed confusion will continue to exist surrounding moose harvest regulations in Unit 15B, an increase in illegal harvest will likely occur, and legal harvest opportunity that is biologically sustainable will be missed.

These differences have caused confusion for moose hunters and there are no biological concerns for the moose population in the areas. The area in question was previously managed under a drawing permit. Habitat conditions improved significantly due to wildfire activity benefitting moose. This portion of 15B can support the additional harvest that is likely to occur by having season dates and bag limits aligned with 15B remainder.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-ACR6)

PROPOSAL 12

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
(15)		
Unit 17(A)		
Up to 2 moose per regulatory year, only as follows:		
RESIDENT HUNTERS:		
1 moose by registration permit only; or	Aug. 25–Sept. 25 (Subsistence hunt only)	
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 by emergency order; or	Winter Season to be announced by emergency order (Subsistence hunt only)	
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 of Game (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 Alaska Department of Fish and Game.

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 when the population exceeds 1,200 moose a bag limit of up to two moose is established. Based on the most recent survey with good conditions in March 2017, both conditions have been met with a population estimate of 1,990 moose ± 437 . 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 to provide additional harvest opportunities. This population is currently contributing to the growth of adjacent moose populations, especially to the north and west.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-067)

PROPOSAL 58

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	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(11)		
Unit 13		
1 moose per regulatory year, only as follows:		
RESIDENT HUNTERS:		
...		
1 antlerless moose by drawing permit only in Unit 13(A); 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)	
...		

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually by the Board of Game (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 adopted an October and March season during the February 2013 board meeting.

Since the establishment of this hunt, the Department of Fish and Game (ADF&G) has issued 10 permits annually in Unit 13A. ADF&G 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 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 ADF&G 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 have generally increased at an average rate of 2% per year in the intensive wolf management area over the past 10 years. The current population objective for Unit 13A is 3,500–4,200, and the population was estimated to be above objectives in 2015–2016 and within objectives

in 2017. The antlerless hunt in western Unit 13A is necessary to maintain the population within the intensive management objectives. The additional harvest provided by the hunt will also assist in achieving the harvest objectives for the population. If antlerless moose hunting opportunities are 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 achieves the harvest objectives recommended by the public, advisory committees, and the board.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-41)

PROPOSAL 79

5 AAC 85.045(a)(12). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose draw permits 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 2,000 antlerless moose permits may be issued; or	Aug. 20—Sept. 25 (General hunt only) Nov. 1—Dec. 15 (General hunt only)	No open season
...		
1 moose by targeted permit only; by crossbow, shotgun or bow and arrow only; up to 200 permits may be issued	Winter season to be announced by emergency order (General hunt only)	No open season
Unit 14(B)		
1 moose per regulatory year, only as follows:		
...		
1 moose by targeted permit only; by crossbow, shotgun or bow and arrow only; up to 100 permits may be issued.	Winter 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 hunts must be reauthorized annually by the Board of Game. There are two types of antlerless moose hunts in the Matanuska-Susitna 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 February 2019 yielded an estimate of 7,900 moose in Unit 14A. This estimate was greater than the post-hunt objective of 6,000–6,500 moose and less than the 2017 survey estimate of 8,756 moose indicating that the increased antlerless harvests are having the desired effect of reducing the population. A sex and age composition survey completed in 2019 demonstrated a bull ratio of 34 bulls:100 cows and a calf ratio of 29 calves:100 cows.

Antlerless moose hunts have been authorized in Unit 14A since 2001 in order to regulate the growth of the population. The permit level was increased from 450 to 1,000 in 2013 to account for the continued increase in the population and again in spring 2018 from 1,000 to 2,000. Harvest from the increased permit levels is expected to bring the population back to within the objective for the unit of 6,000–6,500. Without this harvest the density of moose will increase and we anticipate an increase the number of moose-human conflicts, and moose may experience nutritional stress as the population nears carrying capacity.

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 267 moose per year were killed in the Matanuska-Susitna Valley area during the last few years of average snowfall and substantially more were killed during higher snowfall years. The Department of Fish and Game 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-F20-068)

PROPOSAL 174

5 AAC 85.045(a)(1). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Unit 1C.

5 AAC 85.045. Hunting seasons and bag limits for moose.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 1C, Berners Bay drainages 1 moose by drawing permit only; up to 30 permits may be issued ...	Sept. 15 – Oct. 15 (General hunt only)	Sept. 15 – Oct. 15
Unit 1C, 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? Antlerless moose hunts have been authorized for the Berners Bay and Gustavus moose populations in Unit 1C for over a decade. Those hunts were instituted as tools that could be used to manage both populations to within carrying capacity of the limited habitat in each area and to offer additional harvest opportunity as warranted. Antlerless hunts have been periodically and successfully used in both areas but must be reauthorized each year.

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. The Department o Fish and Game (department) has been successful at maintaining the Berners Bay 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 ranged from 10 bull and 10 antlerless permits to 7 bull permits and no antlerless permits. The average annual harvest of bulls during that period was 7 moose, and in years when antlerless permits were issued, the annual harvest averaged 4 cow moose. Although the department has authorization to issue a total of 30 permits each year, no more than 20 total permits have been issued during a single year. Several severe winters from 2006 – 2009 resulted in overwinter mortality and population declines. No Berners Bay moose permits were issued from 2007–2013.

The number of drawing permits issued annually for Berners Bay is based on the number of moose observed during winter aerial surveys. The mean number of moose seen during aerial surveys conducted from 1990–2006 was 77 (range: 59–108). The number of moose seen on surveys declined during consecutive severe winters from 2006–2009 and with only 33–62 moose seen during surveys from 2007–2009. Since 2010 most winters have been moderate to mild and the population has recovered. Under ideal survey conditions in 2012, 102 moose were observed, including 21 bulls, 81 cows, and 14 calves. Since 2012 the moose population has been stable. The department was unable to complete a survey during the winter 2019/2020, but snow conditions were some of the deepest since the harsh winter of 2006/2007. The most recent survey was February 2019 when a total of 106 moose were observed, including 2 bulls, 26 cows, 13 calves, and 65 adult moose of unknown sex. Based on that survey and sightability of collared moose, the population was estimated to be 137 +/- 23 moose. Since 2012 the moose population in Berners Bay has been stable and even though we received heavy snow during the 2019/2020 winter it came later in the year and the impacts to the moose population are expected to be minimal. Moose management is expected to be the same this coming year as it has been since 2012.

Berners Bay is almost entirely federal land. In 2018 the Federal Subsistence Board established a federal moose hunt in Berners Bay requiring 25% of the available hunting opportunity to be reserved for federally qualified hunters residing in Units 1-5. Those same federally qualified users also remain eligible for Berners Bay permits issued through the state draw permit system. The federal hunt was first held in fall 2019, and two of the seven available permits were issued to federally qualified hunters leaving 5 permits available for the State hunt. In 2020 the state plans to offer 6 permits while 2 permits will be issued to Federally qualified hunters. All permits will be for bulls only.

The department maintains management authority over the Berners Bay population and would like to retain the ability to implement an antlerless moose hunt should the population or habitat conditions warrant that type of management.

Gustavus: The Gustavus moose population (Unit 1C) rapidly expanded from just a few animals in the 1980s and early 1990s to a peak of about 400 animals in 2003. In 2002 the department estimated the density of moose on the Gustavus Forelands winter range exceeded 5 moose per km² despite only a small proportion of the area consisting of productive (abundant willow) winter habitat. In response to concerns about moose damaging the winter habitat, the department initiated spring browse surveys in 1999 and determined that an unsustainable level (85% - 95%) of the current annual growth of willow twigs had been consumed by moose.

To conserve winter habitat the department requested the board authorize an antlerless moose hunt, and the first antlerless hunt was held in the fall of 2000. From 2002– 2008 hunters harvested between 11 and 67 antlerless moose annually, depending on the number of permits issued. No hunt

was held in fall 2007 due to high moose mortality during the severe winter of 2006-2007, and no antlerless hunts have been held since 2009.

The objective of antlerless moose hunts in Gustavus is to maintain the moose population using the winter range to levels commensurate with habitat capability. Based on aerial surveys corrected for sightability and annual browse surveys, management of the population using antlerless hunts has been successful. In 2013, under favorable survey conditions 186 moose (25 bulls, 121 cows, and 40 calves) were observed. The population estimate corrected for sightability was 323 +/- 87 moose. Under poor late winter survey conditions in March 2014 91 (24 cows, 12 calves, and 55 unknown) moose were seen yielding a sightability corrected population estimate of 244 +/- 98 moose. Due to exceptionally mild winter weather, at the time of this survey, a number of radiocollared moose had already transitioned to forested summer range outside the survey area. There was little snow cover during the winter of 2014–15, so no survey was attempted. A moose survey was completed in February 2020 and observed 91 moose (1 bull, 10 cows, 13 calves, and 67 unknown sex). The resulting population estimate was 188 ± 56 moose. This is slightly lower than the winter 2018 estimate of 218 ± 22 moose.

Severe winters from 2006 through 2009 reduced calf survival, but since then calf survival has improved. Even during severe winters survival of adult females remained high at about 89%. Given the improved survival rate of calves during successive mild winters and stable cow survival, the potential exists for the Gustavus moose population to rapidly increase.

The Gustavus moose population is currently at a level the department believes is appropriate for the available winter habitat. However, it is important to retain the ability to implement antlerless hunts should the population increase to a level that is detrimental to the habitat.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-069)

PROPOSAL 175

5 AAC 85.045(a)(3). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose hunt 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 (Nunatak Bench)	Nov. 15 - Feb. 15	Nov. 15 - Feb. 15
1 moose by registration permit only; up to 5 moose may be taken		

What is the issue you would like the board to address and why? The Nunatak Bench (Unit 5A) hunt area is managed as a separate population because it is generally isolated from other moose populations by fiords and glaciers. The area is subject to severe winters and has low capability to support moose relative to other moose habitat in Unit 5A. The purposes of this hunt are to provide opportunity as the population allows and to maintain the number of moose within a level the limited habitat can support. This hunt opens after other moose hunts in the unit have closed, and it is a popular alternative for hunters who were unsuccessful during those hunts. Because much of the open season for this hunt takes place after bulls have dropped their antlers, either sex may be harvested.

The Nunatak Bench strategic moose management plan calls for a post-hunt population of no more than 50 moose. During an aerial survey in 2001 52 moose were seen. From 2005 through 2012 only 11 – 14 moose with 1 or 2 calves were seen during surveys. The decline in moose numbers following the 2001 survey may be related to the 68-foot rise of Russel Fiord flooding and damaging habitat when it was blocked by the surging Hubbard Glacier during 2003. Due to poor weather and the remoteness of the location this area was not surveyed again until December 2015 when a total of 14 moose (3 bulls, 2 cows, 3 calves, and 6 unknown) were seen. A series of severe winters from 2006 through 2012 may have inhibited recovery of the population. Anecdotal reports from hunters indicate that wolves in the area may also be inhibiting recovery of this small population.

From 1997 through 2004 an average of 12 either sex permits were issued annually with an average of 4 people hunting each year. During that period a total of 15 moose (9 bulls, 6 cows) were

harvested for an average of about 2 moose per year. No permits have been issued and no moose have been harvested in this area since 2004.

The department believes it is important to retain the ability to implement an antlerless hunt in this area to prevent habitat damage should the population increase. The department will continue to monitor this population as conditions allow, but we do not plan to issue hunt permits until the population reaches at least 25 moose.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-F20-070)

Proposal 176

5 AAC 085.045(4). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose season in Unit 6C.

Seasons and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(4) ...		
Unit 6(C)		
1 moose per regulatory year, only as follows:		
1 moose by drawing permit only; up to 40 permits for bulls and up to 20 permits for antlerless moose may be issued; or	Sept. 1-Oct. 31 (General hunt only)	No open season.
1 moose by registration permit only;	Nov. 1-Dec. 31	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 of Game. The Department of Fish and Game recommends reauthorizing the state antlerless hunt in Unit 6C to achieve the harvest objectives when the federal subsistence hunt is not able to achieve the desired level of harvest. The population objective in Unit 6C is 600–800 moose. A population estimate completed during March 2018 yielded an estimate of 677 moose, 32% 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, there has not been a state antlerless hunt since RY99. The department would like to retain the ability to implement an antlerless moose hunt should the population or habitat conditions warrant it.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-066)

Proposal 177

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

Reauthorize the antlerless moose season in the Twentymile/Portage/Placer hunt area in Units 7 and 14C.

Seasons and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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(5)

...

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, and the Department of Fish and Game (department) recommends reauthorizing the antlerless hunt in Units 7 and 14C. 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. The number of permits issued depends on the current population estimate and bull:cow ratios, as well as estimated winter mortality. A December 2016 aerial composition count of moose in the Twentymile, Portage, and Placer river drainages found 153 moose with a bull:cow ratio of

30 bulls per 100 cows and a calf:cow ratio of 18 calves per 100 cows. Since 2016, there has not been enough snow in early winter to conduct surveys.

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. This hunt has been successful in creating additional moose hunting opportunity with little or no controversy.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-F20-062)

Proposal 178

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

Reauthorize the antlerless moose seasons in Unit 14C as follows:

Seasons and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(12)		
...		
Unit 14(C), Joint Base Elmendorf-Richardson (JBER) Management Area	Sept. 1—Mar 31 (General hunt only)	Sept 1.—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	Sept. 1—Mar 31 (General hunt only)	Sept 1.—Mar 31
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	Sept 1.—Nov. 30 (General hunt only)	No open season
1 antlerless moose by drawing permit only, and by bow and arrow, shotgun, or muzzleloading black powder rifle 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	Sept. 1—Sept. 30 (General hunt only)	Sept. 1—Sept. 30
1 bull by registration permit only	Oct. 1—Nov. 30 (General hunt only)	Oct. 1—Nov. 30
...		
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	Sept. 1—Sept. 30 (General hunt only)	Sept. 1—Sept. 30
1 antlerless moose by drawing permit only; up to 60 permits may be issued; or	Sept. 1—Sept. 30 (General hunt only)	No open season
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
...		

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually, and the Department of Fish and Game recommends reauthorizing the antlerless moose hunts in Unit 14C. 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 (1,500 moose). This population size has been demonstrated to reduce over-browsing of winter habitat, moose-vehicle collisions, moose-human conflicts in urban areas, and starvation during severe winters. These hunts have also been successful in providing additional moose hunting opportunities in the state’s human population center with little controversy.

Moose in Unit 14C are managed intensively for a population objective of 1,500–1,800 moose and an annual harvest objective of 90–270 moose (5AAC 92.108). The number of antlerless permits issued depends on the current population estimate and bull:cow ratios, as well as estimated winter mortality. In 2013, the department estimated that the moose population contained approximately 1,533 moose in Unit 14C from a combination of population census, composition surveys and extrapolation to unsurveyed areas. Since 2013, a lack of snow has limited the ability to conduct surveys, however there is no indication from either harvest or roadkill numbers that the moose population has changed significantly.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-063)

Proposal 179

5 AAC 085.045(13). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose season on Kalgin Island in Unit 15B as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(13) ...		
Unit 15(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 of Game. The current regulation for hunting moose on Kalgin Island in Unit 15B allows hunters to harvest 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 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 of Fish and Game staff counted 118 moose on Kalgin Island in February 2020. This count exceeded the population objective of 20–40 moose. In the last 10 years, an average of 122 permits were issued for this hunt; of which 87 permittees hunted, with an annual harvest of 30 moose.

The any moose registration hunt is recommended to provide liberal harvest opportunity 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 make over-harvest unlikely.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-064)

Proposal 180

5 AAC 85.045(13). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Unit 15C as follows:

This proposal would reauthorize the antlerless moose hunt for the Homer bench (DM549) and the targeted hunt (AM550).

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(13)		
...		
Unit 15(C), that portion south of the south fork of the Anchor River and northwest of Kachemak Bay		
RESIDENT HUNTERS:		
...		
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	Oct. 20—Nov. 20	
...		
1 moose by targeted permit only[,]	Oct. 15—Mar. 31	
NONRESIDENT HUNTERS:		
...		
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		Oct. 20—Nov. 20

Remainder of Unit 15(C)

...

RESIDENT HUNTERS:

...

1 moose by targeted permit only[,] Oct. 15–Mar. 31

What is the issue you would like the board to address and why? Antlerless moose seasons must be reauthorized annually, and the Department of Fish and Game recommends reauthorization of the Homer bench hunt (DM549) and the targeted hunt (AM550) along the Sterling Highway in 15C for the 2020-21 hunting season.

In February 2017, a GSPE census was conducted in the northern portion of Unit 15C (north of Kachemak Bay) and resulted in a population estimate of 3,529 moose (95% CI: range 2,769–4,289), of which 19% (95% CI: 14–24) were calves. This equates to a density of approximately 3 moose/mi² in the census area. Density estimates for the winter are difficult to determine because the areas available to moose vary depending on snowfall, but winter density is consistently higher. Fall composition counts in core count areas during December 2019 provided a bull ratio of 40 bulls:100 cows.

The Homer bench land in Unit 15C, which encompasses the hunt boundary of DM549, contains high densities of moose in winters when deep snow drives moose into human populated areas. Even without deep snow, some moose die due to malnutrition and negative interactions with humans occur as moose become more aggressive in their search for food around human residences. Fifty permits were issued in each of the last 10 years resulting in an average harvest of 24 cows annually.

The purpose of AM550 is to allow for the harvest of antlerless moose along the Sterling Highway in Unit 15C during deep snow winters if they pose a threat to highway vehicles. On average, 62 known animals are killed each year in vehicle collisions in Unit 15C. The department will decide when and where permits will be issued during the hunt period. Targeted hunts are administered through a registration permit and up to 100 moose may be taken. The number of permits issued each year will depend on conditions, and it is possible no permits will be issued in some years based on snow conditions.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-F20-065)

PROPOSAL 181

5 AAC 85.045(a)(16). Hunting seasons and bag limits for moose.

Reauthorize the resident antlerless moose season in Unit 18 as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(16) ...		
Unit 18, that portion that drains into Kuskokwim Bay south of the Carter Bay drainage		
RESIDENT HUNTERS:		
...		
1 moose by registration Permit only; to be announced by emergency order	Dec. 1—Mar. 31 (Season to be announced)	No open season.
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	
2 antlerless moose; or	Oct. 1—Nov. 30.	
2 moose	Dec. 1—April 30.	
NONRESIDENT HUNTERS:		
...		
1 antlerless moose		Dec. 1—Mar. 15

...

What is the issue you would like the board to address and why? To be retained, the antlerless moose seasons in Unit 18 must be reauthorized annually. The current antlerless hunts in the Remainder of Unit 18 were adopted at the January 2014 Board of Game meeting in Kotzebue. The current antlerless hunt in the Goodnews Hunt area and nonresident antlerless hunt was adopted at the January 2017 Board of Game meeting in Bethel. Both of these antlerless hunts were amended at the BOG meeting in 2020 in Nome. The Board has previously reauthorized the antlerless moose season for resident hunts in Unit 18 remainder for regulatory year (RY) 2016 through RY2020. This proposal requests reauthorization for RY2021.

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 17,000 animals with calf:cow ratios ranging from 65:100 to 75:100, and twinning rates from 20% 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 with high recruitment and adult survival.

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 4 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.

The moose population in the Goodnews River drainage had grown steadily in the past 15 following a closure in 2004. The fall hunt has had a quota of 10 in the first few years of the hunt and recently increased to 30. The season has not been closed by EO and the past few years the quota was not met. In the two years that the winter hunt has been held, harvest has been low (only 5 killed in RY2017 and none in RY2018). The population now is over 300 moose and based on the steady growth in moose populations and productivity, ADF&G proposes continued antlerless moose hunts in the Goodnews River Drainage.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-047)

PROPOSAL 182

5 AAC 85.045(a)(17). Hunting seasons and bag limits for moose.

Reauthorize a winter antlerless moose season during February in a portion of Unit 19D as follows.

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

(17)

...

Unit 19(D) East, those portions of the Kuskokwim River drainage within 19(D) upstream from the Selatna River drainage, but excluding the Black River drainage

RESIDENT HUNTERS:

...

1 moose, by registration permit only, a person may not take a cow accompanied by a calf

Feb 1 – Last day of Feb.

...

What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. The goal is to provide additional harvest opportunity and meet harvest objectives.

The moose population in Unit 19D East has approximately doubled since predator removals began in 2003. The Department of Fish and Game is starting to observe decreasing nutritional status as indicated by declining twinning rates. Prior to intensive management, bull-to-cow ratios along the Kuskokwim River drainage were measured at 18 bulls per 100 cows. After predator reductions and a closure of moose hunting in the Bear Control Focus Area (BCFA), ratios improved to 39 bulls per 100 cows by 2007. By 2019 ratios had declined again and the two-year average was 18 bulls per 100 cows.

To maintain a healthy and productive moose population, department research (Boertje et al. 2007) indicates that when the two-year average twinning rate is 11–20% populations should be stabilized. Twinning rates in Unit 19D East remained high until 2015; however, the current 2-year average twinning rate is now 16%, indicating a decreasing nutritional status in this population. The current

Intensive Management plan for Unit 19D East calls for to stabilization of the population through harvest when the -year average twinning rate is between 15 and 20%.

Additional harvest opportunity is available. Winter hunts distribute hunter pressure and allow access to areas inaccessible in the fall.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-036)

PROPOSAL 183

5 AAC 85.045(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
(18)		
Unit 20(A), the Ferry Trail Management Area, Wood River Controlled Use Area, and the Yanert Controlled Use Area		
RESIDENT HUNTERS:		
...		
1 antlerless moose by drawing permit only; up to 2,000 permits may be issued in combination with the Remainder of Unit 20(A); a person may not take a cow accompanied by a calf; or	Aug. 15–Nov. 15	
1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or	Oct. 1–last day of Feb.	
...		
1 moose by targeted permit only; by shotgun, crossbow, or bow and arrow only; up to 100 permits may be issued	Season to be announced by emergency order	
...		
Remainder of Unit 20(A)		

RESIDENT HUNTERS:

...

Units and Bag Limits	Resident Open Season Subsistence and General Hunts	Nonresident Open Season
1 antlerless moose by drawing permit only; up to 2,000 permits may be issued in combination with Unit 20(A), the Ferry Trail Management Area, Wood River Controlled Use Area, and the Yanert Controlled Use Area; a person may not take a cow accompanied by a calf; or	Aug. 15–Nov. 15	
1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or	Aug. 25– last day of Feb.	
...		
1 moose by targeted permit only; by shotgun, crossbow, or bow and arrow only; up to 100 permits may be issued	Season to be announced by emergency order	
...		

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

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

Reauthorizing antlerless moose hunts will allow hunting opportunity and harvest to increase and allow the Department of Fish and Game to manage the moose populations at an optimum level. The additional harvest will help in meeting IM harvest objectives without reducing bull-to-cow ratios to low levels. Meat and subsistence hunters will benefit from the opportunity to harvest

cow moose. Moose populations will benefit by maintaining moose densities at a level compatible with their habitat. Motorists and residents may benefit from reduced moose–vehicle collisions and moose–human conflicts.

The current objective is to maintain moose numbers within the IM population objective of 10,000–15,000 moose, while monitoring indicators of moose and habitat condition for positive density-dependent responses. The Unit 20A population was estimated at 9,581–13,959 moose (90% confidence interval) in 2019. This estimate falls within the IM population objective. The department does not want the population to further increase because of concerns density effects. The department will monitor Unit 20A calves for twinning rates below 20% and short yearling weights below 400 pounds to detect density dependent issues. Therefore, the intention is to harvest moose at a rate of 1% of the population which has been shown to stabilize the moose population at its current level. Antlerless harvest will be by drawing permits for a majority of Unit 20A and a registration permit outside the nonsubsistence area in northwest Unit 20A near Nenana. The harvest objective will be based on the most recent survey results.

The number of moose in Unit 20A was estimated at 17,768 (2.6 moose/mi²) in 2003. Research indicated this high-density moose population was experiencing density-dependent effects, including low productivity, relatively light calf weights, and high removal rates of winter forage. The objective beginning in regulatory year 2004–2005 (RY04) was to reduce moose numbers to the population objective of 10,000–12,000 moose (1.5–1.8 moose/mi²) unless indicators of moose condition showed signs of improvement at higher densities. In 2016, the Board of Game adopted the IM population objective of 10,000–15,000 moose and the 2019 population estimate is within the IM objective.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-038)

PROPOSAL 184

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

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

Units and Bag Limits (18)	Resident Open Season Subsistence and General Hunts	Nonresident Open Season
...		
Unit 20(B), that portion within Creamer’s refuge		
...		
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–Nov. 27	Sept. 1–Nov. 27
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	Dec. 1–Jan. 31	Dec. 1–Jan. 31
Unit 20(B), remainder of the Fairbanks Management Area		
...		
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–Nov. 27	Sept. 1–Nov. 27

Units and Bag Limits	Resident Open Season Subsistence and General Hunts	Nonresident Open Season
1 moose by targeted permit only; up to 100 permits may be issued	Season to be announced by emergency order	No open season.
Unit 20(B), that portion within the Minto Flats Management Area		
RESIDENT HUNTERS:		
...		
1 antlerless moose by registration permit only	Oct. 15– Last day of Feb.	No open season.
...		
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	
1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or	Oct. 1– Last day of Feb.	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 moose by drawing permit only; by crossbow, bow and arrow, or muzzleloader only; up to 100 permits may be issued; or	Sept. 16–Last day of Feb.	No open season.

Units and Bag Limits	Resident Open Season Subsistence and General Hunts	Nonresident Open Season
1 moose by targeted permit only; by crossbow, shotgun, or bow and arrow only; up to 100 permits may be issued	Season to be announced by emergency order	No open season.
Remainder of Unit 20(B)		
1 antlerless moose by drawing permit only; by youth hunt only; up to 200 permits may be issued; or	Aug. 5–Aug. 14	No open season
...		
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	No open season.
1 antlerless moose by registration permit only; a person may not take a cow accompanied by a calf; or	Oct. 1– Last day of Feb.	
1 moose by targeted permit only; by crossbow, shotgun, or bow and arrow only; up to 100 permits may be issued	Season to be announced by emergency order	No open season.
...		

What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. The 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 exceed population objectives causing habitat degradation and a loss of opportunity to hunt a surplus of antlerless moose. Furthermore, subsistence hunters in the portion of Unit 20B in the Minto Flats Management Area may not have a reasonable opportunity to pursue moose for subsistence uses.

The reauthorization of antlerless moose hunts in Unit 20B will allow Alaska Department of Fish and Game (ADF&G) to manage the moose population within the population objectives of 12,000

to 15,000 moose. Hunting opportunity and harvest will increase and allow ADF&G to manage this moose population at optimum levels. The additional harvest is necessary to meet intensive management harvest objectives while maintaining bull-to-cow ratios within objectives. Subsistence hunters will have reasonable opportunity to harvest cow moose. Moose populations will benefit by maintaining moose densities at levels compatible with their habitat. Motorists and residents may benefit from reduced moose–vehicle collisions and moose–human conflicts.

The moose population level in Unit 20B is currently within the population objective of 12,000–15,000 moose. The population declined from an estimated 20,173 moose in 2009 to 11,064 in 2015, due in large part to antlerless moose hunts designed to lower the population to those objectives. The population increased slightly to 12,871 moose in 2017. To maintain the current population level the department recommends limited antlerless hunts in the Minto Flats Management Area (MFMA) and the Fairbanks Management Area (FMA). The department will continue to monitor the moose population and may implement additional antlerless hunts if the population continues to trend upward.

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

The number of moose–vehicle collisions in the FMA is 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, 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 have remained lower since, presumably, in part due to consistent antlerless moose harvests.

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 (4.4 moose/mi²). To reduce the moose population, the harvest of antlerless moose during RY12 and RY13 was about 2.5% of the population. The fall 2015, 2017, and 2019 estimates showed more appropriate densities of 1.6, 1.7, and 2.0 moose/mi², respectively. Because the population level has been stable and within the population objectives, the antlerless harvest has been reduced to approximately 1% of the total population to maintain the current population level.

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

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-40)

PROPOSAL 185

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

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

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

(18)

...

Unit 20(D), that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River, except the Delta Junction Management Area and the Bison Range Controlled Use Area

RESIDENT HUNTERS:

...

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

Oct. 10–Nov. 25

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

Oct. 10–Nov. 25

...

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

...

1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 10 permits may be issued; a person may not take a calf or a cow accompanied by a calf;

Sept. 1–Sept. 30

Sept. 1–Sept. 30

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

RESIDENT HUNTERS:

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

Sept. 1–Sept. 15

...

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

Oct. 10–Nov. 25

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

Oct. 10–Nov. 25

NONRESIDENT HUNTERS:

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

Sept. 1–Sept. 15

...

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually. The objectives of the Unit 20D antlerless moose hunts are to 1) stabilize population growth of this high-density moose population; 2) address concerns about range degradation, reduced nutritional condition, and reduced reproductive success; 3) make progress

toward meeting the Unit 20D intensive management (IM) harvest objective of 500–700 moose; and 4) provide youth and disabled veteran hunting opportunity. These objectives are being met.

If antlerless moose hunts are not reauthorized, the moose population could quickly increase to levels beyond the ability of the habitat to support the moose population. Opportunity to hunt a harvestable surplus of cow moose would be lost, and the ability to meet IM harvest objectives could be compromised. Additionally, the population may need to be reduced dramatically when new data are available and analyzed.

Antlerless moose hunts are offered in southwest Unit 20D, which has the highest moose density in the unit. This area has great potential for population growth due to an abundance of high-quality moose habitat created from extensive land clearing for agricultural use and multiple wildfires over the past 30 years. Total moose harvest in all of Unit 20D averaged 248 moose (an average of 231 bulls and 17 antlerless moose) during regulatory years 2017 and 2018.

Antlerless hunting opportunity is limited at present because this small opportunity helps to maintain the moose population within the ability of habitat to support the population. The largest antlerless harvest (n=113) that occurred recently in Unit 20D was in 2009 when antlerless hunts were newly authorized. The southwest Unit 20D population estimate (approximately 4,000–4,500 moose, with a sightability correction factor applied) and bull harvest in southwestern Unit 20D (226–282) have been stable since 2011. The 2019 population estimate for southwest Unit 20D was 3,647 moose (corrected for sightability) with a density of 2.8 moose per square mile, 31 calves:100 cows and 28 bulls:100 cows.

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

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

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

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-42)

PROPOSAL 186

5 AAC 85.045(a)(19)(B). Hunting seasons and bag limits for moose.

Reauthorize a winter any-moose season during March in a portion of Unit 21D.

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

(19)

Unit 21(D), that portion south of the South bank of the Yukon River, downstream of the up-river entrance of Kala Slough and west of Kala Creek

RESIDENT HUNTERS:

...

1 moose, by registration permit only, up to 15 days during March; a person may not take a cow accompanied by a calf

(Winter season to be announced)

...

What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. The goal is to provide additional harvest opportunity and meet harvest objectives. This harvest opportunity of antlerless moose recently emerged because the moose population in the Kaiyuh Flats is increasing rapidly, especially the number of cows in the population. This reauthorization will likely improve or maintain hunting opportunity. If this antlerless moose hunt is not reauthorized, opportunity to utilize a harvestable surplus of cow moose would be lost, and the ability to meet IM harvest objectives could be compromised. In addition, rather than allow the population to go through dramatic rates of expansion and contraction, it is prudent to dampen the current accelerating rate of increase.

The Intensive Management (IM) harvest objective for Unit 21D is 450–1,000 moose. The 10-year average estimated harvest during 2009–2018 was 412 moose, which includes the reported and estimated unreported harvest. The annual estimated harvest has not met the harvest objective since 2003 when the estimated harvest was 489 moose. Additional harvest from this hunt will help make progress toward achieving the IM harvest objectives without reducing bull-to-cow ratios to low levels. Subsistence hunters will benefit from the opportunity to harvest cow moose.

Analysis of three Trend Count Areas (Squirrel Creek, Pilot Mountain, and Kaiyuh Slough TCAs) within the Kaiyuh Flats in this hunt area showed a significant increase in moose abundance among

all age classes, and adult moose abundance increased 57% above the 16-year average by 2017. Geospatial Population Estimate data also showed a statistically significant increase from 1,897 ($\pm 11\%$) moose in 2011 to 4,116 ($\pm 10\%$) moose in 2017. Moose twinning data for the hunt area also showed high and stable twinning rates since 2004.

The portion of 21D affected by this reauthorization is approximately 21% (2,559 mi²) of Unit 21D (12,093.6 mi²). Moose abundance in this area was estimated at 4,000–4,500 moose, which is approximately 39–44% of the total moose estimated in Unit 21D. At 10,305 moose ($\pm 1,546$) in 2017, the mid-point for the total 21D moose population estimate was above the IM population objective for all of Unit 21D (12,093.6 mi²) of 9,000–10,000 moose.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-F20-44)

PROPOSAL 187

5 AAC 85.045(a)(19). Hunting seasons and bag limits for moose.

Reauthorize a winter any-moose season during part of February and March in Unit 21E as follows.

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

(19)

Unit 21(E)

RESIDENT HUNTERS:

...

1 moose, by registration permit
only, a person may not take a cow
accompanied by a calf

Feb 15 – Mar 15

...

What is the issue you would like the board to address and why? Antlerless moose hunting seasons must be reauthorized annually. The goal is to provide additional harvest opportunity and meet harvest objectives.

This moose population is beginning to show signs of nutritional stress. The most current survey in 2019 indicated there are 9,777 moose in Unit 21E, which is within the range of the Intensive Management (IM) population objective of 9,000-11,000 moose. There is currently a harvestable surplus of 390 moose, however only approximately 200 moose are harvested each year and there are additional moose available to harvest. Bull-to-cow ratios are high, with 42 bulls per 100 cows in 2018. The Intensive Management (IM) harvest objective for Unit 21E is 550-1,100 moose.

Within the Unit 21E moose survey area (4,094 mi²), the overall moose density increased from 1.0 moose/mi² in 2000 to 2.1 moose/mi² in 2019. During most of these years of growth, twinning rates remained high; however, twinning rates began declining in 2015. The 2-year average twinning rate in the Holy Cross area is 12%, while north of Anvik and Shageluk (where moose density is lower) the twinning rate is 32%. The current intensive management plan calls for stabilizing the population through harvest when the 2-year average twinning rate is 15–20%. Browse utilization is high in the Holy Cross area where the population density is highest and where winter mortality in deep snow years is a concern.

Additional harvest opportunity is available. Winter hunts distribute hunter pressure and allow access to areas inaccessible in the fall.

PROPOSED BY: Alaska Department of Fish and Game

(HQ-F20-045)

PROPOSAL 188

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
<p>(24)</p> <p>...</p> <p>Unit 26(A), that portion west of 156° 00' W. longitude and excluding the Colville River drainage.</p> <p>1 moose; a person may not take a calf or a cow accompanied by a calf</p> <p>...</p>	<p>July 1—Sept. 14</p>	<p>No open season.</p>

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 moose population in the western portion of Unit 26A north of the Colville drainage is somewhat unique compared to the unit-wide population, and the distribution is very sparse because there is very little moose habitat in the coastal plain. However, each year a small number of bulls and cows migrate into the area 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 establish a population, but these moose provide the only opportunity to harvest a moose in the northwestern portion of Unit 26A.

Unit 26A moose population estimates have historically fluctuated between 294 and 609 moose between 2011 and 2014. More recently, moose counts have observed 145 moose and 218 moose in 2015 and 2018, respectively. The overall trend appears to be slow growth after a decline that started about 2007. The number of moose in the antlerless hunt area is difficult to estimate, but is approximately 10 moose. Harvest reports indicate 4 antlerless moose have been harvested since 2005, and the annual harvest rate of antlerless moose is less than 1% of the total population. Due to the low harvest rate the Department of Fish and Game recommends reauthorization of the antlerless moose season in this area to provide additional hunting opportunity for the small number of hunters to opportunistically harvest antlerless moose in this remote portion of Unit 26A.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-049)

PROPOSAL 6

5 AAC 92.015. Brown bear tag fee exemptions.

Reauthorize the brown bear tag fee exemptions for the Central/Southwest Region as follows:

5AAC 92.015. Brown bear tag fee exemptions.

(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 of Game (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 brown bears by allowing opportunistic harvest.

In March 2011 the board also exempted brown bear tag fees for bear hunts near communities in Unit 9 to address public safety concerns in communities. Brown bears are abundant in Unit 9 and are managed as a trophy species. However, 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-F20-053)

PROPOSAL 189

5 AAC 92.015(a)(4). Brown bear tag fee exemptions.

Reauthorize resident grizzly/brown bear tag fee exemptions throughout Interior and Northeast 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? Brown bear tag fee exemptions must be reauthorized annually. Reauthorizing the exemption allows residents who have not purchased the \$25 brown bear tag to take bears opportunistically. This reauthorization would assist with our objective of managing Region III brown bear populations for hunter opportunity and would continue to allow hunters to take brown bears opportunistically.

Region III (Interior and Eastern Arctic) brown bear populations are healthy, and harvest is monitored through the brown bear sealing requirement. Reauthorizing all resident brown bear tag fees throughout Region III maintains simpler regulations, high resident hunter opportunity, and is not likely to cause declines in these brown bear populations. This reauthorization includes tag fee exemptions for subsistence registration permit hunts in Units 19A and 19B (downstream of and including the Aniak River drainage), 21D, and 24.

The Department of Fish and Game estimates that brown bear harvest accounts for less than 6% of the bear population. Harvest is composed primarily of males and is sustainable. Where harvests are elevated (i.e., Units 20A, 20B, 20D, and portions of 26B), brown bear populations are managed by adjusting seasons and bag limits. The resident tag fees that were in place prior to 2010 appeared to have little effect on harvest rates in these areas.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-051)

PROPOSAL 190

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 7 years; Unit 22, where the tag fee has been exempted for 17 years; Unit 23, where the tag fee has been exempted for 12 years; and Unit 26A, where the tag fee has been exempted for 7 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.

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 17-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 annual harvests vary due to weather and 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 0–3 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 zero and five bears are taken annually by subsistence hunters.

PROPOSED BY: Alaska Department of Fish and Game (HQ-F20-061)
