

ALASKA DEPARTMENT OF FISH AND GAME
STAFF COMMENTS
SOUTHCENTRAL REGION PROPOSALS
ALASKA BOARD OF GAME MEETING
ANCHORAGE, ALASKA
MARCH 15-19, 2019



The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Game meeting, March 15-19, 2019 in Anchorage, Alaska, and are prepared to assist the public and board. The stated staff comments should be considered preliminary and subject to change, if or when new information becomes available. Final department positions will be formulated after review of written and oral testimony presented to the board.

Draft analysis and recommendations for Proposals 54-58 are pending and will be posted on the Board of Game’s website at

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 59 – 5 AAC 85.025(1). Hunting seasons and bag limits for caribou.

PROPOSED BY: Alaska Department of Fish & Game

WHAT WOULD THE PROPOSAL DO? This proposal would change the season dates for Kenai Mountain caribou hunt DC001 to match the season dates for all other caribou hunts on the Kenai Peninsula.

WHAT ARE THE CURRENT REGULATIONS? The current regulations as defined in 5 AAC 85.025(1) are:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(1)		
...		
Unit 7 north of the Sterling Highway and west of the Seward Highway 1 caribou by drawing permit only; up to 500 permits	Aug. 10–Dec. 31	Aug. 10–Dec. 31

The Kenai Mountain Caribou herd is located entirely within the Anchorage–Matsu–Kenai Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The open season for DC001 would be changed to Aug. 10–Sep. 20. This season date change is not expected to significantly impact harvest because most harvest has historically occurred before the proposed change in season ending date. The change in season date will benefit managers by providing the opportunity to collar animals outside of the hunt season when animals are in their best condition.

BACKGROUND: The Kenai Mountain Caribou herd was established in 1965 with the reintroduction of 15 caribou. From this effort, the herd grew to around 200 animals in 1971 and a hunt was established in 1972 for which twenty permits were issued. As the herd continued to grow, the number of permits issued increased, peaking at 250 permits. This was the number of permits issued from 1996 until 2013, which yielded an average annual harvest of 21 caribou. By 2013, the population dropped back down to approximately 150 caribou and only 25 permits have been issued by the state since 2015. Total annual harvest has averaged 4 caribou since permit numbers were decreased.

A federal subsistence season was established in 2010. Eligible communities include Hope and Cooper Landing. Approximately twenty–eight federal permits are issued annually, yielding an average harvest of 2 caribou per year.

The latest date a caribou has been harvested since permit numbers were reduced is October 1. Since the permit reduction, 67% of the harvest occurred in the month of August, and in the last 10 years, 82% of the harvest has occurred before Sept. 20.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. It would align season dates for all state managed caribou hunts on the Kenai Peninsula, move the harvest period outside the rut, and allow the department the opportunity to collar animals outside the hunt period when animals are in their best condition.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

Draft analysis and recommendations for Proposals 60-62 are pending and will be posted on the Board of Game’s website at <http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 63 – 5 AAC 85.045 Hunting seasons and bag limits for moose.

PROPOSED BY: Ninilchik Traditional Council.

WHAT WOULD THE PROPOSAL DO? The current general season harvest ticket resident bag limit for moose in Unit 15 would expand to 1 antlered bull with a spike on at least one side, or fork on at least one side, or 50” wide, or 4 or more brow tines on at least one side and the nonmotorized portions of the season would no longer exist in Unit 15C.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, Kalgin Island in Unit 15B, and a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek are all outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose. There is also a positive customary and traditional use finding for moose in 15B Kalgin Island, and an ANS of 2.

Units 15A and 15C have positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

Unit 15C IM objectives are:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would expand the definition of a legal bull in the majority of Unit 15 hunts to include fork bulls for resident hunters and remove the “Lower Kenai Controlled Use Area” from regulation. Harvest would likely increase by minimal numbers in Unit 15A due to low population levels. A slight increase in harvest can be expected in mainland Unit 15B in the near future; however, if the moose population increases as projected the fork and other portions of the harvest can be expected to increase proportionally. Harvest in the nonsubsistence portion of 15C, however, would likely see an immediate increase that would put harvest within Intensive Management harvest objectives. If adopted for the Unit 15C Tier II hunt (one bull) or for the Unit 15B Kalgin Island registration hunt (one moose), there would be a reduction in subsistence opportunity due to the changes in bag limits.

The inclusion of fork bulls, however, is not projected to be sustainable in the long term. If fork antlered bulls are included in the general season harvest ticket hunt, bull:cow ratios can be expected to fall below management objectives.

Removal of the “Lower Kenai Controlled Use Area” would increase motorized traffic within the controlled use area during the current motorized closed periods of September 16–19 and 22–25. How such an increase would affect harvest success or user conflict is unknown.

BACKGROUND: Moose population status and trend are variable between management units on the Kenai Peninsula. Moose numbers in 15A are at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose

(95% CI \pm 274). The 2018 composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose population in Unit 15A is expected to remain at low densities until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI \pm 67). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover occurred in this unit through the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15C moose in the nonsubsistence area are currently at high densities and harvest opportunity has been limited in recent years. The most recent population estimate, conducted in 2017, produced a point estimate of 3,529 moose (95% CI \pm 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have all produced bull to cow ratios over the management objective of 20–25 bulls:100 cows, while calf ratios are in the low to moderate range (23 calves:100 cows, 4-year average). The most recent bull to cow ratio was 40 bulls:100 cows and the calf ratio was 30 calves:100 cows. Composition counts in 2016, 2017, and 2018 indicated 40, 55, and 40 bulls:100 cows, respectively, in this portion of Unit 15C, compared to the 9 bulls:100 cows observed in 2010 (when fork antlered bulls were legal to harvest). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001. Unit 15C, however, has always been within IM population objectives, but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

In the past, including fork antlered bulls in the general season harvest ticket hunt lead to a reduction in bull:cow levels below management objectives, (Unit 15C in 2010, 9 bulls:100 cows). From 1998 to 2010, fork harvest averaged 50–55 percent of the total general season harvest ticket harvest in Units 15A, 15B, and 15C. From 1998 to 2010, when “fork” bulls were legal to harvest, on average 68, 22, and 120 fork antlered moose were harvested in 15A, 15B, and 15C respectively.

The Lower Kenai Controlled Use area was established by the Board in 1985 and currently prohibits the use of motorized vehicles (except aircraft or boat) for moose hunting, including the transportation of moose hunters, their hunting gear, and/or parts of moose, from Sept. 16–19, and Sept. 22–25. However, this does not apply to the use of a motorized vehicle on a state or

borough-maintained highway or on graveled portions of Oilwell, Brody, and Tustumena Lake roads, or driveways used for direct access to a primary residence or business.

DEPARTMENT COMMENTS: The Department is **NEUTRAL** concerning adding fork bulls to the general season harvest ticket bag limit. Past experience suggests the addition of fork antlered bulls will eventually result in bull:cow ratios below management objectives. The population cannot sustain the additional harvest of fork antlered bulls to current general season harvest ticket regulations and maintain a bull:cow ratio within management objectives. If adopted for the Unit 15C Tier II hunt, and Unit 15B Kalgin Island registration hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

The Department is **NEUTRAL** on eliminating the Controlled Use Area because this is an allocative issue. The area was created to decrease conflict between user groups.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 64 – 5 AAC 85.045 Hunting seasons and bag limits for moose.

PROPOSED BY: Central Peninsula Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? The current general season harvest ticket resident bag limit for moose in Unit 15 would expand to 1 antlered bull with a spike on at least one side, or fork on at least one side, or 50” wide, or 4 or more brow tines on at least one side.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, Kalgin Island in Unit 15B, and a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek are all outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area.

Units 15A and 15C have positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

Unit 15C IM objectives are:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would expand the definition of a legal bull in the majority of Unit 15 hunts to include fork bulls for resident hunters. Harvest would likely increase by minimal numbers in Unit 15A due to low population levels. A slight increase in harvest can be expected in Unit 15B in the near future; however, if the moose population increases as projected the fork and other portions of the harvest can be expected to increase proportionally. Harvest in the nonsubsistence portion of 15C, however, would likely see an immediate increase that would put harvest within Intensive Management harvest objectives. If adopted for the Unit 15C Tier II hunt (one bull) or for the Unit 15B Kalgin Island registration hunt (one moose), there would be a reduction in subsistence opportunity due to the changes in bag limits.

The inclusion of fork bulls, however, is not projected to be sustainable in the long term. In the past, including fork antlered bulls in the harvest ticket hunt lead to a reduction in bull:cow levels below management objectives, (Unit 15C in 2010, 9 bulls:100 cows). If fork antlered bulls are included in the general season harvest ticket harvest, bull:cow ratios can be expected to fall below management objectives.

BACKGROUND: Moose population status and trend are variable between management units on the Kenai Peninsula. Moose numbers in 15A are at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose (95% CI \pm 274). The 2018 composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose population in Unit 15A is expected to remain at low densities until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI \pm 167). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover occurred in this unit through the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15C moose in the nonsubsistence area are currently at high densities and harvest opportunity has been limited in recent years. The most recent population estimate conducted in 2017 produced a point estimate of 3,529 moose (95% CI \pm 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have all produced bull to cow ratios over the management objective of 20–25 bulls:100 cows, while calf ratios are in the low to moderate range (23 calves: 100 cows, 4-year average). The most recent bull to cow ratio was 40 bulls:100 cows and the calf ratio was 30 calves:100 cows. Composition counts in 2016, 2017, and 2018 indicated 40, 55, and 40 bulls: 100 cows, respectively, in this portion of Unit 15C, compared to the 9 bulls:100 cows observed in 2010 (when fork antlered bulls were

legal to harvest). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001. Unit 15C, however, has always been within IM population objectives, but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

From 1998 to 2010, fork harvest averaged 50-55 percent of the total general season harvest ticket hunt in Units 15A, 15B, and 15C. From 1998 to 2010, when “fork” bulls were legal to harvest, on average 68, 22, and 120 fork antlered moose were harvested in 15A, 15B, and 15C respectively.

DEPARTMENT COMMENTS: The Department is **NEUTRAL** concerning adding fork bulls to the general season harvest ticket bag limit. Past experience suggests the addition of fork antlered bulls will eventually result in bull:cow ratios below management objectives. We believe the population cannot sustain the additional harvest of fork antlered bulls to current general season harvest ticket regulations and maintain a bull:cow ratio within management objectives. If adopted for the Unit 15C Tier II hunt, and Unit 15B Kalgin Island registration hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 65 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Kenai/Soldotna Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? Change the general season harvest ticket resident bag limit for moose in Units 7 and 15 to 1 antlered bull with a spike on at least one side, or at least 50” wide, or 3 or more brow tines on at least one side.

WHAT ARE THE CURRENT REGULATIONS? The current regulations as defined in 5 AAC 5 AAC 85.045 are:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(6)		
...		

Unit 7, that portion west of the Resurrection Creek Trail and north of the Sterling Highway

1 bull per regulatory year, only as follows:

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)

Sept. 1–Sept. 25

...

Remainder of Unit 7

Sept. 1–Sept. 25
(General hunt only)

Sept. 1–Sept. 25

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

(13)

...

Unit 15(A), that portion east of the Mystery Creek road and the Pipeline Road, and north of the Sterling Highway

1 bull per regulatory year, only as follows:

1 bull with spike or 50-inch antlers or antlers with 4 or more brow tines on one side; by bow and arrow only; or

Aug. 22– Aug. 29
(General hunt only)

No open season

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)

No open season

1 bull with spike–fork antlers or 50-inch antlers or antlers with 3 or

Oct. 10–Nov. 10
(General hunt only)

Oct. 10–Nov. 10

more brow tines on one side by drawing permit only; up to 25 permits may be issued in combination with Unit 7, that portion west of the Resurrection Creek Trail and north of the Sterling Highway

Remainder of Unit 15(A)

1 bull per regulatory year, only as follows:

1 bull with spike or 50-inch antlers or antlers with 4 or more brow tines on one side, by bow and arrow only; or

Aug. 22– Aug. 29
(General hunt only)

No open season

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

Sept. 1–Sept. 25
(General hunt only)

No open season

Unit 15(B), that portion bounded by a line running from the mouth of Shantatalik 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 15B boundary to the mouth of Shantatalik Creek

Sept. 1–Sept. 20
(General hunt only)
Sept. 26–Oct. 15
(General hunt only)

Sept. 1–Sept. 20
Sept. 26–Oct. 15

1 bull with 50–inch antlers or antlers with 3 or more brow tines on one side, by drawing permit only; up to 100 permits may be issued

Remainder of Unit 15B

1 bull per regulatory year, only as follows:

1 bull with spike or 50–inch antlers or antlers with 4 or more brow tines on one side, by bow and arrow only; or

Aug. 22–Aug. 29
(General hunt only)

No open season

1 bull with spike or 50–inch antlers or antlers with 4 or more brow tines on one Side

Sept. 1–Sept. 25
(General hunt only)

No open season

...

Unit 15(C), that portion south of the south fork of the Anchor River and northwest of Kachemak Bay

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)

...

NONRESIDENT HUNTERS

1 bull with 50–inch antlers or 25 antlers with 4 or more brow tines on one side; or

Sept. 1–Sept.

...

Remainder of Unit 15C

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

...

NONRESIDENT HUNTERS:

1 bull with 50–inch antlers or antlers with 4 or more brow tines on one side; Sept. 1–Sept. 25

There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose. There is also a positive customary and traditional use finding for moose in 15B Kalgin Island, and an ANS of 2.

The majority of the moose seasons listed above are in the Anchorage–Matsu–Kenai Nonsubsistence Use Area.

Units 15A and 15C have positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

Unit 15C IM objectives are:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The definition of a legal bull in all of Units 7 and the majority of Unit 15 would be expanded to include bulls with 3 brow tines on at least one side. The addition of 3 brow tine bulls to the harvest would increase the opportunity for bull harvest in the majority of areas. Harvest would likely increase by minimal numbers in Units 7, 15A, and 15B in the near future due to low

population levels. Harvest in 15C, however, would likely see an immediate increase that may put harvest within Intensive Management harvest objectives.

As the population in mainland 15B increases with habitat turnover an additional increase in harvest is likely. The inclusion of 3 brow tine bulls to the harvest is projected to be sustainable under current management objectives and the sustained yield principle for all units.

If adopted for the Unit 15C Tier II hunt (one bull) or for the Unit 15B Kalgin Island registration hunt (one moose), there would be a reduction in subsistence opportunity due to the changes in bag limits.

BACKGROUND: Moose population status and trend are variable between management units on the Kenai Peninsula. Unit 7 currently has low moose densities due to a lack of quality habitat. A population estimate has never been conducted in Unit 7 and composition count data are lacking in recent years. The most recent composition data was collected in December of 2013, which indicated a bull ratio of 25 bulls:100 cows and a calf ratio of 16 calves:100 cows. Bull ratios are within the current management objective of 20–25 bulls:100 cows. Moose numbers in Unit 15A are also at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose (95% CI \pm 274). The 2018 composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose populations in Units 7 and 15A are expected to remain at low density until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI \pm 167). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover occurred in this unit due to the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15C moose in the nonsubsistence area are currently at high densities and harvest opportunity has been limited in recent years. The most recent population estimate conducted in 2017 produced a point estimate of 3,529 moose (95% CI \pm 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves:100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001. Unit 15C, however, has been within IM population objectives, but fell below harvest objectives when the definition of a legal bull for harvest was

restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

From 1998 to 2010, when “3 brow tine” bulls were legal to harvest during the general season harvest ticket hunt, on average 6, 15, 4 and 27 bulls with 3 brow tines that were less than 50 inches wide were harvested in 7, 15A, 15B, and 15C respectively.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. A portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are customarily and traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of the GMU outside the nonsubsistence area lacks a C&T finding for moose (see Figure 65-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.

If adopted for the Unit 15C Tier II hunt, and Unit 15B Kalgin Island registration hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.



Figure 65-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 66 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Central Peninsula Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? Change the general season harvest ticket resident bag limit for moose in Unit 15 to 1 antlered bull with a spike on at least one side, or at least 50” wide, or 3 or more brow tines on at least one side.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, Kalgin Island in Unit 15B, and a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek are all outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose. There is

also a positive customary and traditional use finding for moose in 15B Kalgin Island, and an ANS of 2.

Units 15A and 15C have positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

Unit 15C IM objectives are:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

The definition of a legal bull in the majority of hunts in Unit 15 would be expanded to include bulls with 3 brow tines on at least one side. The addition of 3 brow tine bulls to the harvest would increase the opportunity for bull harvest in the majority of areas. Harvest would likely increase by minimal numbers in Units 15A, and 15B in the near future due to low population levels. Harvest in the nonsubsistence portion of 15C, however, would likely see an immediate increase that may put harvest within Intensive Management harvest objectives.

As the population in mainland 15B increases with habitat turnover an additional increase in harvest is likely to occur. The inclusion of 3 brow tine bulls to the harvest is projected to be sustainable under current management objectives and the sustained yield principle for the majority of units.

If adopted for the Unit 15C Tier II hunt (one bull) or for the Unit 15B Kalgin Island registration hunt (one moose), there would be a reduction in subsistence opportunity due to the changes in bag limits.

BACKGROUND: Moose population status and trend are variable between management units on the Kenai Peninsula. Moose numbers in Unit 15A are at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose (95% CI ± 274). The 2018 composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose population in Unit 15A is expected to remain at low density until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI ± 167). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover

occurred in this unit due to the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15C moose in the nonsubsistence area are currently at high densities and harvest opportunity has been limited in recent years. The most recent population estimate conducted in 2017 produced a point estimate of 3,529 moose (95% CI ± 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves:100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001. Unit 15C, however, has been within IM population objectives, but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

From 1998 to 2010, when “3 brow tine” bulls were legal to harvest during the general season harvest ticket hunt, on average 15, 4 and 27 bulls with 3 brow tines that were less than 50 inches wide were harvested in 15A, 15B, and 15C respectively.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. If adopted for the Unit 15C Tier II hunt, and Unit 15B Kalgin Island registration hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 67 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Oliver Jackson.

WHAT WOULD THE PROPOSAL DO? The proposal will change the resident bag limit for moose in Units 15A and 15B to 1 bull with at least 4 points on the main palm on one side or 3 brow tines on one side.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, Kalgin Island in Unit 15B is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is an ANS for Kalgin Island of 2 moose.

Unit 15A has a positive finding for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Spike bulls would be eliminated from the bag limit in Units 15A and 15B and all moose with more than 3 points on the main palm on one side or 3 brow tines on one side would be legal. This would essentially allow the harvest of almost all bull moose greater than 1 year of age, which is likely unsustainable. However, subsistence opportunity on Kalgin Island in Unit 15B would be reduced, since the bag limit there is one moose.

BACKGROUND: The proponent clarified the intent of the proposal was for moose with at least 4 points on the main palm, not one side. Moose population status and trend are variable between management units on the Kenai Peninsula. Moose numbers in Unit 15A are at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose (95% CI ± 274). The 2018 composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose population in Unit 15A is expected to remain at low density until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI ± 167). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover occurred in this unit due to the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. There are not enough data currently to determine if the harvest of all bulls with 4 or more points on the main palm and all bulls with 3 or more brow tines is sustainable within Units 15A and mainland 15B. If adopted for the Unit 15B Kalgin Island hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 68 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Richard McGahan, Sr.

WHAT WOULD THE PROPOSAL DO? The proposal will change the resident bag limit for moose in Units 15A and 15B to 1 bull with 5 or more points on the main palm, shortens the bow only season to 5 days, and shortens the remainder of the season to 10 days.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, Kalgin Island in Unit 15B is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is an ANS for Kalgin Island of 2 moose.

Unit 15A has a positive finding for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Spike bulls would be eliminated from the bag limit in Units 15A and 15B and all moose with at least 5 points on the main palm on one side would be legal. The bow and arrow only season would be shortened to 5 days and the remainder of the season harvest ticket season to 10 days. This would essentially open all bull moose greater than 1 year of age for harvest, which is likely unsustainable even with a short season. However, subsistence opportunity on Kalgin Island in Unit 15B would be reduced, since the bag limit there is one moose.

BACKGROUND: Moose population status and trend are variable between management units on the Kenai Peninsula. Moose numbers in Unit 15A are at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose (95% CI ± 274). The 2018 composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose population in Unit 15A is expected to remain at low density until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI ± 167). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover occurred in this unit due to the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. There are not enough data currently to determine if the harvest of all bulls with more than 5 points on the main palm is sustainable within Units 15A and mainland 15B. There are also not enough data to determine if shortening the general season harvest ticket season to 10 days and the bow season to 5 days would prevent overharvest. If adopted for the Unit 15B Kalgin Island hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

Draft analysis and recommendations for Proposals 69-71 are pending and will be posted on the Board of Game's website at

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 72 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Michael Schuster.

WHAT WOULD THE PROPOSAL DO? This proposal eliminates the general season harvest ticket moose hunt in Unit 15C and establishes a resident-only registration hunt, requiring in person registration, with a split season of:

- Sept. 1– Sept. 14: 1 bull with 3 or more points on one side (anything larger than a fork)
- Sept. 15– Sept. 25: 1 bull with 50–inch antlers or antlers with 4 or more brow tines on one side

The early season hunt would be limited to a quota set by ADF&G. Any hunter participating in this hunt would be ineligible to hunt moose anywhere else in the state. The second season would not have a quota.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line

from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose.

Unit 15C has positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15C are as follows:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Moose hunting in Unit 15C would be conducted under a registration hunt with the season dates and bag limits of:

- Sept. 1–Sept. 14: 1 bull with 3 or more points on one side (under quota set by ADF&G)
- Sept. 15–Sept. 25: 1 bull with 50–inch antlers or antlers with 4 or more brow tines on one side (No quota)

Any hunter participating in this hunt would be ineligible to hunt moose anywhere else in the state.

While this type of hunt should increase hunter success during the Sept. 1–Sept. 14 season in the nonsubsistence area, the reporting period during that portion of the hunt would need to be short (such as within 24 hours of kill) and the season would likely close within the first 3–4 days. If an overharvest of bulls occurred during the early portion of the season, it is possible that the late season of Sept. 15–Sept. 25 would not open. A registration hunt would likely lead to crowding and possible hunter conflicts in the field. In addition to potential crowding, this hunt strategy (the Sept. 1–Sept. 14 portion) would also increase the potential to harvest a higher than desired proportion of bulls in areas that have easier access, although management objectives could be maintained under this hunt system. However, if adopted for the Unit 15C Tier II hunt (one bull), there would be a reduction in subsistence opportunity due to the change in bag limits.

BACKGROUND: Unit 15C moose in the nonsubsistence area are currently at high densities and harvest opportunity has been limited in recent years. The most recent population estimate conducted in 2017 produced a point estimate of 3,529 moose (95% CI \pm 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018,). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15C has always been within IM population objectives since they were established but fell below harvest objectives when the definition of a legal bull for harvest was dramatically

restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

Current prohibitions on participants in one hunt participating in another hunt for the same species only exist in one heavily regulated area due to the board's recognition of the customary and traditional use pattern for that particular opportunity. The board will need to determine if imposing the same restriction for these hunts is allowable.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. If such a hunt were instituted several issues would likely arise. The early hunt would likely be very short in duration (3–4 days) and require effective and regular communication between hunters and department management staff. Safety concerns would exist due to crowding during the early season hunt, there would be an increased potential for a higher than desired proportion of bulls being harvested in areas with easy access, and it is possible the second portion of the hunt would be shortened or eliminated depending on the number of animals harvested in the early season.

If adopted for the Unit 15C Tier II hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

Additionally, a portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are customarily and traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of Unit 15C outside the nonsubsistence area lacks a C&T finding for moose (see Figure 72-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.



Figure 72-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 73 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Steve Vanek.

WHAT WOULD THE PROPOSAL DO? This proposal eliminates the general season harvest ticket moose hunt in Unit 15C and establishes a resident only registration hunt with season dates of Sept. 1–25.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose.

Unit 15C has positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15C are as follows:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Moose hunting in Unit 15C would be conducted under a registration hunt with the season dates of Sept. 1–25. The bag limit would be any bull except one with a spike or fork on one or both sides. The hunt would be managed under a quota established by ADF&G and registration would occur only at the Homer Fish and Game Office. Hunters would be required to report harvest within 2 days of kill. Any hunter participating in this hunt would be ineligible to hunt moose anywhere else in the state. If overharvest occurred in any given year, the harvest quota would be adjusted the following year to maintain bull:cow ratio management objectives.

This type of hunt structure should result in an increased harvest and increased success rate in the nonsubsistence area. As a consequence this may result in fewer hunters being able to participate if the harvest “cap” is met in a short time period. A registration hunt would likely be short in duration and require effective and regular communication between hunters and department management staff. Safety concerns would exist due to crowding, and there would be an increased potential for a higher than desired proportion of bulls being harvested in areas with easy access.

A registration permit distributed solely from the Homer office would significantly increase management time required for this hunt by local staff: an average of 980 hunters participated in the general season harvest ticket hunt in 15C in the last 5 years. Management objectives could be maintained under this hunt system. However, if adopted for the Unit 15C Tier II hunt (one bull), there would be a reduction in subsistence opportunity due to the change in bag limits.

This proposed restriction to prohibit participants from participating in another hunt for the same species also differs from the existing restriction by being specific to one sex only. As written, participants in this hunt would be able to hunt cow moose outside of Unit 15C.

BACKGROUND: Unit 15C moose in the nonsubsistence area are currently at high densities, have a high bull:cow ratio, and can support additional harvest. The most recent population estimate conducted in 2017 produced a point estimate of 3,529 moose (95% CI ± 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018,). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

From 2013–2018 the average annual harvest of spike antlered bulls in the nonsubsistence area of Unit 15C was 44 bulls. While these would no longer be available for harvest, composition data

show there are more bulls in the greater than spike or fork – less than 50” category than there are spike antlered bulls (150 vs 35, respectively, for the 2018 composition survey).

Unit 15C has always been within IM population objectives since they were established but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

Current prohibitions on participants in one hunt participating in another hunt for the same species only exist in one heavily regulated area due to the board’s recognition of the customary and traditional use pattern for that particular opportunity. The board will need to determine if imposing the same restriction for these hunts is allowable.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. If such a hunt were instituted, however, several issues would likely arise. The hunt would be very short in duration (2–3 days) and safety concerns would exist due to crowding.

If adopted for the Unit 15C Tier II hunt, the board should discuss how the change continues to provide a reasonable opportunity for success in harvesting a moose for subsistence uses.

Additionally, a portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are customarily and traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of the GMU outside the nonsubsistence area lacks a C&T finding for moose (see Figure 73-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.



Figure 73-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 74 – 5 AAC 85.045 Hunting seasons and bag limits for moose.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a resident-only any bull drawing hunt in Unit 15C.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose.

Unit 15C has positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15C are as follows:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would establish a resident-only any bull drawing hunt in Unit 15C. Establishment of any bull drawing hunts would give managers the flexibility to increase and decrease harvest by managing the number of permits distributed each year. This would allow the Department to better match harvest to current population levels and maintain the population within management objectives. Currently, harvest could be increased in Unit 15C outside of the Tier II area, which will help meet Intensive Management harvest goals, limit the possibility of damaging moose habitat due to the overutilization of suitable forage, and help prevent a large scale die off should an extreme snow event occur.

BACKGROUND:

Unit 15C moose in the nonsubsistence area are currently at high densities, have a high bull:cow ratio, and can support additional harvest. The most recent population estimate, conducted in 2017, produced a point estimate of 3,529 moose (95% CI \pm 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15C has always been within IM population objectives since they were established but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. It is likely that harvest opportunity has been missed in some portions of Unit 15C in recent years and there are indications that the moose population in Unit 15C outside the nonsubsistence area is at or near carrying capacity: the 40 bulls:100 cows observed in 2018 is double the lower end of the objective for bulls (20–25 bulls:100 cows), and harvest has been below Intensive Management harvest objectives since antler restrictions were put in place in 2011. If considered for the Tier II hunt area, the board should determine if there is enough of a harvestable surplus to be able to provide drawing hunt opportunity.

Additionally, a portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are

customarily and traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of the GMU outside the nonsubsistence area lacks a C&T finding for moose (see Figure 74-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.



Figure 74-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 75 – 5 AAC 85.045 Hunting seasons and bag limits for moose.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would establish an archery and muzzleloader permit hunt for moose in Unit 15C.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose.

Unit 15C has positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15C are as follows:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would establish a permit hunt for moose in Unit 15C with weapons restrictions limiting it to archery (bow and arrow) or muzzleloader only. The bag limit would be one moose, harvest of cows with calves prohibited. Up to 50 archery permits and 50 muzzleloader permits may be issued with no more than 10% of the permits allocated to nonresidents. All applicants would be required to have successfully completed a hunter education course. Bowhunter applicants would be required to hold a bowhunter certification and muzzleloader applicants would be required to hold a muzzleloader certification. The addition of this hunt would help reach Intensive Management harvest objectives and keep the population within carrying capacity.

BACKGROUND: Unit 15C moose in the nonsubsistence area are currently at high densities, have a high bull:cow ratio, and can support additional harvest. The most recent population estimate, conducted in 2017, produced a point estimate of 3,529 moose (95% CI ± 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15C has always been within IM population objectives since they were established but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

Bow and arrow only hunts currently exist in Units 15A and mainland 15B. These hunts occur August 22 to August 29, before the general season harvest ticket season opens. Bow and arrow harvest averages 22% (68) of the moose taken under harvest tickets in Units 15A and 15B in the past 5 years.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. This proposal would potentially increase harvest in Unit 15C, which would help meet Intensive Management harvest goals. However, if considered for the Tier II hunt area, the board should determine if there is enough of a harvestable surplus to be able to provide the requested hunt opportunities.

A portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are customarily and traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of the GMU outside the nonsubsistence area lacks a C&T finding for moose (see Figure 75-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.



Figure 75-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 76 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal would establish a resident-only any-bull drawing hunt in Unit 15C.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek is outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose.

Unit 15C has positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15C are as follows:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would establish a resident-only any bull drawing hunt in Unit 15C. Establishment of any bull drawing hunts would give managers the flexibility to increase and decrease harvest by managing the number of permits distributed each year. This would allow the Department to better match harvest to current population levels and maintain the population within management objectives. Currently, harvest could be increased in Unit 15C, which will help meet Intensive Management harvest goals, limit the possibility of damaging moose habitat due to the overutilization of suitable forage, and help prevent a large scale die off should an extreme snow event occur.

BACKGROUND:

Unit 15C moose in the nonsubsistence area are currently at high densities, have a high bull:cow ratio, and can support additional harvest. The most recent population estimate, conducted in 2017, produced a point estimate of 3,529 moose (95% CI \pm 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15C has always been within IM population objectives since they were established but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. It is likely that harvest opportunity has been missed in Unit 15C in the nonsubsistence area in recent years and there are indications that the moose population in Unit 15C is at or near carrying capacity: the 40 bulls:100 cows observed in 2018 is double the lower end of the objective for bulls (20–25 bulls:100 cows), and harvest has been below Intensive Management harvest objectives since antler restrictions were put in place in 2011. However, if considered for the Tier II hunt area, the board should determine if there is enough of a harvestable surplus to be able to provide the requested hunt opportunities.

A portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are customarily and traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point

Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of the GMU outside the nonsubsistence area lacks a C&T finding for moose (see Figure 76-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.



Figure 76-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 77 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Alaska Department of Fish & Game

WHAT WOULD THE PROPOSAL DO? Establishes a drawing antlerless moose hunt north of the south fork of the Anchor River in Unit 15C.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65. This hunt would occur in the Anchorage-Matsu-Kenai Peninsula nonsubsistence area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would increase harvest opportunity in a portion of Unit 15C, which will help meet Intensive Management harvest goals, limit the possibility of damaging moose habitat due to the overutilization of suitable forage, and help prevent a large scale die off should an extreme snow event occur.

BACKGROUND: Unit 15C moose in the nonsubsistence area are currently at high densities, have a high bull:cow ratio, and can support additional harvest. The most recent population estimate, conducted in 2017, produced a point estimate of 3,529 moose (95% CI ± 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15C has always been within IM population objectives since they were established but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. It is likely that harvest opportunity has been missed in this portion of Unit 15C in recent years. There are indications that the moose population in Unit 15C is at or near carrying capacity and harvest has been below Intensive Management harvest objectives since antler restrictions were put in place in 2011.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 78 – 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Kenai/Soldotna Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would establish resident-only any bull drawing hunts in Units 7 and 15.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65; however, Kalgin Island in Unit 15B, and a portion of Unit 15C near Seldovia, Port Graham, and Nanwalek are all outside the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. There is a positive customary and traditional use finding for moose in Unit 15C, that portion southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, and an amount reasonably necessary for subsistence of 5–6 moose. There is also a positive customary and traditional use finding for moose in 15B Kalgin Island, and an ANS of 2.

Units 15A and 15C have positive findings for intensive management (IM) under 5 AAC 92.108. IM objectives in Unit 15A are as follows:

Population objective: 3,000 – 3,500

Harvest objective: 180 – 350

Unit 15C IM objectives are:

Population objective: 2,500 – 3,500

Harvest objective: 200 – 350

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would establish resident-only any bull drawing hunts in Units 7 and 15. Establishment of any bull drawing hunts would give managers the flexibility to increase and decrease harvest within units by managing the number of permits distributed each year. This would allow the Department to better match harvest to current population levels and maintain units within management objectives. Harvest in 15C could be increased with the establishment of draw permits, which will help meet Intensive Management harvest goals, limit the possibility of damaging moose habitat due to the overutilization of suitable forage, and help prevent a large scale die off should an extreme snow event occur.

Due to the moose population status it is unlikely the Department would issue any bull permits in units 7, 15A, or mainland 15B at this time. If bull numbers increase as expected in mainland 15B it is possible that area could with stand additional bull harvest in the not too distant future.

BACKGROUND: Moose population status and trend are variable between management units on the Kenai Peninsula. Unit 7 currently has low moose densities due to a lack of quality habitat. A population estimate has never been conducted in Unit 7 and composition count data are lacking in recent years. The most recent composition data was collected in December of 2013, which indicated a bull ratio of 25 bulls:100 cows and a calf ratio of 16 calves:100 cows. Bull ratios are within the current management objective of 20–25 bulls:100 cows. Moose numbers in Unit 15A are also at low densities due to a lack of quality habitat. The most recent census, conducted in 2013, produced a point estimate of 1,569 moose (95% CI ± 274). The 2018

composition counts produced a bull ratio of 54 bulls:100 cows and a calf ratio of 28 calves:100 cows. This bull to cow ratio is more than twice the current management objective of 20–25 bulls:100 cows. The moose populations in Units 7 and 15A are expected to remain at low density until significant habitat turnover occurs.

Unit 15B moose have been at low densities since the 1990s. In 2017, a moose census was conducted in Unit 15B, which produced a population estimate of 837 moose (95% CI ± 167). No recent composition data have been collected in Unit 15B. In 2014, significant habitat turnover occurred in this unit due to the Funny River Wildfire, which encompassed about 200,000 acres. Consequently, moose numbers are expected to increase in coming years as animals begin to take advantage of early successional habitat.

Unit 15C moose in the nonsubsistence area are currently at high densities and harvest opportunity has been limited in recent years. The most recent population estimate, conducted in 2017, produced a point estimate of 3,529 moose (95% CI ± 760). This is the second highest point estimate on record. Composition counts conducted over the past three years have produced bull to cow ratios of 40, 55, 40 bulls:100 cows (management objectives are 20–25 bulls:100 cows). Calf ratios are in the low to moderate range (average 23 calves: 100 cows, range 18–30, 2016–2018). Nutritional indices, calf ratios, and browse surveys all indicate a population at or near carrying capacity.

Unit 15A has never been within IM population objectives since IM was implemented. The unit did reach harvest objectives once, in 2001. Unit 15C, however, has been within IM population objectives, but fell below harvest objectives when the definition of a legal bull for harvest was restricted in 2011. The restrictions were a response to the low bull:cow ratio that occurred due to overharvest of yearling bulls.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. It is likely that harvest opportunity has been missed in Unit 15C in recent years and there are indications that the moose population in Unit 15C is at or near carrying capacity: the 40 bulls:100 cows observed in 2018 is double the lower end of the bull objective (20–25 bulls:100 cows), and harvest has been below Intensive Management harvest objectives since antler restrictions were put in place in 2011. Moose numbers in Units 7 and 15A are currently low due to habitat restrictions and no significant increase in harvest opportunity will be available in these units until habitat turnover occurs. Mainland Unit 15B has seen recent habitat turnover, but it will likely be a few years before significant additional harvest opportunity exists. If considered for the Tier II or Kalgin Island hunt areas, the board should determine if there is enough of a harvestable surplus to be able to provide drawing hunt opportunity.

A portion of GMU 15C is outside the Anchorage-Matsu-Kenai Nonsubsistence Area, as defined at 5 AAC 99.010(a)(3). The board is directed under AS 16.05.258(a) to identify game populations, or portions of populations, outside the nonsubsistence areas that are customarily and

traditionally taken or used for subsistence (a C&T finding). The board has made a positive C&T finding for the moose population in that portion of this area southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay, determined an amount reasonably necessary for subsistence (ANS) of 5-6 moose, and, because the harvestable surplus is below the minimum ANS, adopted a Tier II subsistence hunt for this portion of the GMU. The remainder of the GMU outside the nonsubsistence area lacks a C&T finding for moose (see Figure 78-1). The board may choose to make a C&T finding for moose in this remaining area. To assist with the finding, staff have prepared a worksheet with background information on moose harvests and uses organized by the eight criteria used by the board to identify C&T uses (5 AAC 99.010(b)). If the board determines that this moose population supports C&T uses, it may also determine an ANS, and will need to decide what regulations are necessary to provide a reasonable opportunity for subsistence uses of this moose population.



Figure 78-1. Map of Anchorage-Matsu-Kenai Nonsubsistence Area boundary and the boundary of the Tier II hunt.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 79 – 5 AAC 92.003. Hunter education and orientation requirements.

PROPOSED BY: Homer Fish and Game Advisory Council.

WHAT WOULD THE PROPOSAL DO? The proposal will requires hunter education for all hunters participating in Unit 15C drawing hunts.

WHAT ARE THE CURRENT REGULATIONS? The current regulations as defined in 5 AAC 92.003 are: (a) Beginning August 1, 2002, a person born after January 1, 1986 that is

- (1) required to have a hunting license must have successfully completed a certified hunter education course in order to hunt in Units 7, 13, 14, 15, and 20;
- (2) not required to have a hunting license, and who has not successfully completed a certified hunter education course, must, in order to hunt in Units 7, 13, 14, 15, and 20 be under the direct immediate supervision of a licensed hunter who
 - (A) is 18 years of age or older and has successfully completed a certified hunter education course; or
 - (B) was born on or before January 1, 1986.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would require all hunters, regardless of age, participating in Unit 15C drawing hunts to have successfully completed a department–approved hunter education course.

BACKGROUND: Specific hunter education requirements are often set in conjunction with areas of higher human population densities and therefore a higher chance of interaction between hunters and non-hunters. Hunter education is required, regardless of age, in several special hunt areas in Alaska, including:

- Eagle River Management area (Unit 14C bears and small game)
- Eklutna Lake Management Area (Unit 14C bears)
- Anchorage Coastal Wildlife Refuge (Unit 14C)
- Mendenhall Wetlands State Game Refuge (Unit 1C)
- Palmer/Wasilla Management Area (Unit 14A shotgun for big game)

Hunter education is also required, regardless of age, for some drawing permits:

- Joint Base Elmendorf Richardson moose hunts (DM421–DM424, DM426–DM428, and DM430)
- Joint Base Elmendorf Richardson black bear (DL455)

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 80– 5 AAC 85.045. Hunting seasons and bag limits for moose.

PROPOSED BY: Brendan Maguire.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a bow and arrow only drawing moose hunt for the Hope/Palmer Creek Valley area and close the general season harvest ticket hunt in this area.

WHAT ARE THE CURRENT REGULATIONS?

See Proposal 65. This area is entirely within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Moose hunting in the Hope/Palmer Creek Valley would be limited to hunting by bow and arrow by drawing permit only. Neither state nor federal regulated harvest is expected to change if this proposal is adopted since an average of fewer than 1 legal moose per year has been harvested in this area since it was opened to moose hunting in 2011. Adoption of this proposal would limit moose hunting pressure and opportunity.

BACKGROUND: The Board of Game established the Resurrection Creek Closed Area in 1980, which included the drainages of Resurrection Creek downstream from Rimrock and Highland creeks, including Palmer Creek. This area was closed to all moose hunting until 2013 when the closure was removed by the Board.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 81 – 5 AAC 92.052. Discretionary permit hunt conditions and procedures.

PROPOSED BY: Jack Polster.

WHAT WOULD THE PROPOSAL DO? Require blaze orange be worn by all moose hunters on Kalgin Island in Unit 15B.

WHAT ARE THE CURRENT REGULATIONS? There are several hunts in Alaska that suggest hunters wear hunter orange while in the field. There are no regulations that require this, and the Department of Law will need to determine if the board has the authority to require this. In the meantime, the board has provided the department with guidance, in the form of (nonregulatory) findings, to instruct hunters participating in certain hunts to wear hunter orange. There is a positive customary and traditional finding for moose on Kalgin Island, and an amount reasonably necessary of 2 moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

All moose hunters on Kalgin Island in unit 15B would be required to wear blaze orange.

BACKGROUND: The International Hunter Education Association (IHEA) – USA is the professional hunter education association affiliated with the Association of Fish and Wildlife Agencies and the 50-state fish and hunter education programs. The IHEA–USA recommends that hunter (blaze) orange is the most effective color to be worn by hunters in the field to prevent hunting incidents. One of the four main causes of hunting incidents is hunter judgment mistakes, such as mistaking another person for game or not checking the foreground or background before firing. The Alaska hunter education course teaches, “No single factor has reduced hunting incidents as much as wearing hunter orange because it reduces incidents where one hunter mistakes another person for game. Over 40 states now require the wearing of hunter orange clothing. The wearing of hunter orange is not required in Alaska but is strongly recommended. It is an unnatural color not found in nature.”

Board of Game findings require hunters to wear hunter/blaze orange for a few specific hunts in Alaska, including targeted hunts for moose and some youth-only hunts (YM541 requires permittees and accompanying adults to wear hunter orange vests).

Many of the states that require hunters to wear hunter/blaze orange require that there be a minimum of 400–500 square inches of blaze orange garments above the waist (upper torso, neck, and head).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. If the board intends to require participants in this hunt wear hunter orange, the department recommends the board instruct the department, in the form of findings, to include it as a condition of the permit.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 82 – 5 AAC 85.045(13). Hunting seasons and bag limits for moose.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO This proposal would reauthorize the antlerless moose hunt for Kalgin Island in Unit 15B.

WHAT ARE THE CURRENT REGULATIONS? The current regulations as defined in 85.045 are:

Resident	
Open Season	
(Subsistence and	Nonresident

Units and Bag Limits	General Hunts)	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

There is a positive customary and traditional finding for moose on Kalgin Island, and an amount reasonably necessary of 2 moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

The antlerless moose season for Kalgin Island (RM572) in Unit 15B would be reauthorized. This hunt will help to maintain moose populations within sustainable levels on Kalgan Island, provide subsistence opportunity, maximize other harvest opportunity, and decrease the chance of high winterkill due to a lack of suitable forage.

BACKGROUND:

Antlerless moose hunts must be reauthorized annually by the Board. 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 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 85 moose on Kalgin Island in March 2018. 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 overharvest.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. This hunt helps to control the moose population on Kalgin Island and keep it within sustainable limits, and provides subsistence opportunity. The department requests that the sealing requirement be removed for moose harvested on Kalgin Island in Unit 15B the island was added

to Unit 15 after the sealing requirement was put in place, and was therefore not the target of the original sealing requirement. .

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 83 – 5 AAC 85.045.(a)(13). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose season in a portion of Unit 15C.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal would reauthorize the antlerless moose hunt for the Homer Bench and the targeted antlerless hunt along the Sterling Highway in Unit 15C.

WHAT ARE THE CURRENT REGULATIONS? The current regulations as defined in 85.045 are:

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 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 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 bull with 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; 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 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

These hunts are within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The antlerless moose season for the Homer Bench (DM549) and the targeted hunt (AM550) along the Sterling Highway in 15C would be reauthorized for the 2019–2020 hunting season. This harvest will help minimize human–moose conflicts and winter kill deaths of moose due to limited habitat on the Homer Bench.

BACKGROUND: Antlerless moose seasons must be re–authorized annually. The Homer Bench in Unit 15C, which encompasses the hunt boundary of DM549, 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 are

also common as moose become more aggressive in their search for food around human residences.

In February 2017, a GSPE population survey was conducted that produced a population estimate of 3,529 moose ± 760. When compared to the 2013 GSPE estimate of 3,204 ± 650, the 2017 estimate suggests the 15C moose population is stable or increasing slightly. Fall composition counts in December 2017 that included the Homer Bench (count area 26) provided a bull ratio of 53 bulls:100 cows and a calf ratio of 22 calves: 100 cows (composition data for all other Unit 15C proposals only included composition data from count areas 20, 21, and 24). Fifty permits were issued in each of the last 10 years, resulting in an average annual harvest of 25 cows per year.

The purpose of AM550 is to allow for the harvest of moose along the Sterling Highway in Unit 15C during winters with deep snow accumulation that result in moose congregating near the Sterling Highway, which pose a significant 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. The hunt is 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. This hunt was established in 2015 and no permits have been issued to date.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Local residents are in favor of a limited antlerless moose harvest that provides additional opportunity and helps to limit habitat degradation and wildlife conflicts.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

PROPOSAL 84 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.

PROPOSED BY: Robert Gauden.

WHAT WOULD THE PROPOSAL DO? Open a resident, archery-only season for Dall sheep in Units 7 and 15. The proposal further suggests the new hunt would be limited to the same hunt area as the existing DS150 hunt in the Round Mountain area.

WHAT ARE THE CURRENT REGULATIONS?

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

Unit 7, that portion south of

the Sterling Highway west of the Seward Highway, and north and east of Kenai Lake; up to 50 permits may be issued

RESIDENT HUNTERS
1 ram with full-curl horn or larger, by drawing permit only

Aug. 10 – Sept.20
(General hunt only)

Aug. 10 – Sept. 20

NONRESIDENT HUNTERS:
1 ram with full-curl horn or larger, every 4 regulatory years, by drawing permit only

Units 7 and 15(A), those portions east of Fuller Lake trail, south of Dike Creek, and a straight line from the source of Dike Creek, east through the divide south of Trout Lake, to Juneau Creek, west of Juneau Creek, and north of the Sterling highway; up to 10 permits may be issued

RESIDENT HUNTERS:
1 ram with full-curl horn or Larger, by drawing permit only

Aug. 10 – Sept. 20
(General hunt only)

Aug. 10 – Sept. 30

NONRESIDENT HUNTERS:
1 ram with full-curl horn or larger, every 4 regulatory years, by drawing permit only

These hunts are in the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

An archery only season for Dall sheep would be established for the Round Mountain (DS150) hunt area in Units 7 and 15 with a bag limit of 1 full-curl or larger ram, by harvest ticket.

Adoption of this proposal is not likely to lead to additional harvest because no additional harvest opportunity has been identified for this area. It might however, lead to the reallocation of harvest from DS150 permit holders to archery-only harvest ticket hunters.

BACKGROUND: Dall sheep numbers on the Kenai Peninsula have declined by approximately 80% since the 1960s. All harvest on the Kenai Peninsula is under full curl management. Very

few legal sheep are found in the Round Mountain management area or the adjacent general season harvest ticket hunt area. In 2018, only 2 legal sheep were identified within the entire area during aerial surveys. Currently 3 permits are issued a year for DS150 and hunt conditions contain no weapon restriction requirements. The 5-year average harvest for DS150 is <1 ram per year.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. At present no additional harvestable surplus is available. Any harvest under this proposed regulation would likely be a reallocation from current DS150 permit holders. Current permit requirements do not limit methods, and any additional hunters in this area are likely to crowd the hunt area.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the Department.

Draft analysis and recommendations for Proposals 85-110 are pending and will be posted on the Board of Game's website at

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 110– 5 AAC 85.040(a)(7). Hunting seasons and bag limits for goat.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal seeks to change the nonresident Lake George goat hunt from a drawing hunt to a registration hunt.

WHAT ARE THE CURRENT REGULATIONS? 5AAC 85.040(a)(7) Hunting season and bag limits for goat.

	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
<u>Units and Bag Limits</u>		

(7)

...

RESIDENT HUNTERS:

1 goat by registration permit only; however, goats may be taken from Aug. 16 through Aug. 31 by bow

Aug. 16 — Nov. 30
(General hunt only)

and arrow only; the taking of nannies with kids is prohibited

NONRESIDENT HUNTERS:

1 goat by [DRAWING] registration permit only; and by bow and arrow only; the taking of nannies with kids is prohibited; or

Aug. 16 – Aug. 31

1 goat by drawing permit only; the taking of nannies with kids is prohibited

Sept. 1 – Oct. 15

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Nonresidents would be allowed to hunt goat in the Lake George hunt area during the archery season under a registration permit.

Changing the nonresident archery drawing hunt back into a registration permit would create additional opportunity for goat hunters and provide another tool for the Department to meet goat harvest objectives in this area.

BACKGROUND: At the 2016 Statewide Board of Game meeting, both the nonresident registration archery and nonresident registration rifle goat hunting seasons were changed to drawing hunts for the remainder of Unit 14C, specifically the Lake George area. This was in response to a Department proposal submitted because nonresident rifle harvest was continually exceeding the set harvest quotas (Table 110-1). The archery portion of this hunt (RG879/DG888) has rarely produced any harvest (Table 110-2).

Table 110-1. Nonresident rifle season harvest in Lake George, regulatory years 2013-2018.

Regulatory Year	Nonresident Permits Issued	Goat Points Harvested ^a	Maximum Allowable Harvest ^b	Permit Type
2013-14	12	10	7	Registration
2014-15	17	12	7	Registration
2015-16	8	6	3	Registration
2016-17	7	7	6	Registration
2017-18	5	4	N/A	Drawing
2018-19	7	6	N/A	Drawing

^aGoat points: 1 billy= 1 goat point; 1 nanny= 2 goat points

^bMaximum Allowable Harvest is combined archery and rifle

Table 110-2. Archery season harvest in Lake George, regulatory years 2013-2018.

Regulatory	Goat Points
------------	-------------

Year	Permits Issued	Harvested^a	Permit Type
2013-14 ^b	6	2	Registration
2014-15 ^b	4	2	Registration
2015-16 ^b	5	0	Registration
2016-17 ^b	6	1	Registration
2017-18 ^c	8	0	Draw (NR)/Reg (R)
2018-19 ^c	7	2	Draw (NR)/Reg (R)

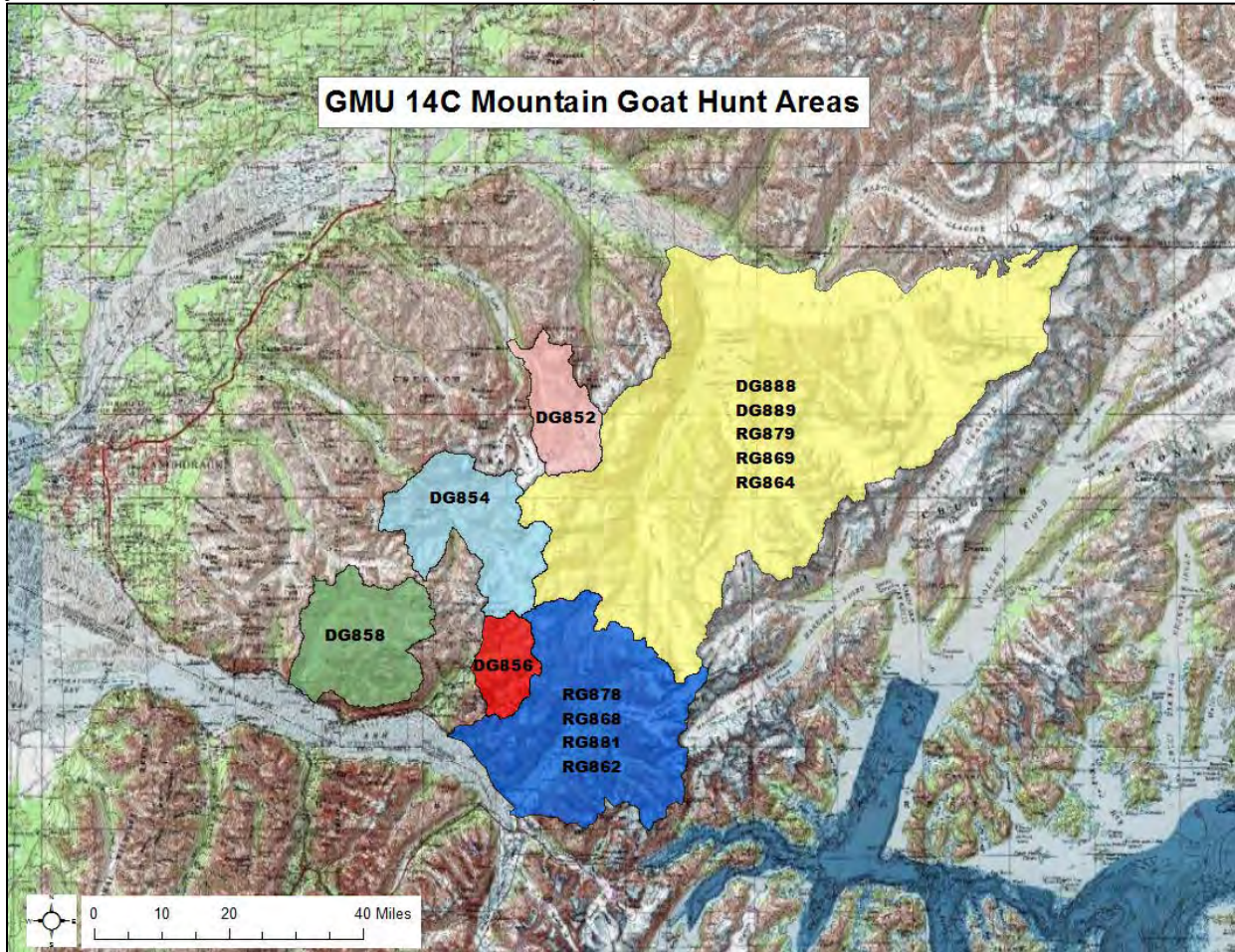
^aGoat points: 1 billy=1 goat point; 1 nanny=2 goat points

^bHunt was combined resident and non-resident under one registration tag

^cIncludes permits issued and harvest from resident (RG879) and nonresident (DG888) archery seasons

The Lake George area (Figure 110-1) is the most popular goat hunting area in Unit 14C and supports the largest numbers of goats in the unit (e.g., a minimum count survey of all goat areas in GMU 14C in 2015 documented that 471 out of 877 (54%) goats observed were in the Lake George area).

Figure 110-1. Map of GMU 14C mountain goat hunt areas. (Lake George hunt area is shown in yellow- DG88/DG889/RG879/RG869/RG864)



DEPARTMENT COMMENTS: The Department is **NEUTRAL** on this proposal because it seeks to change harvest allocation.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 111– 5 AAC 85.045(a)(12). Hunting seasons and bag limits for moose.

Lengthen the hunting season for moose in the Joint Base Elmendorf-Richardson Management Area.

PROPOSED BY: Joint Base Elmendorf-Richardson (JBER).

WHAT WOULD THE PROPOSAL DO? This proposal changes the starting date for fall moose seasons (DM421, DM422, DM423, DM424, and DM428) on Joint Base Elmendorf-Richardson from the day after Labor Day to September 1.

WHAT ARE THE CURRENT REGULATIONS? The current regulations are:

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 per regulatory year by drawing permit, and by muzzleloading blackpowder rifle or bow and arrow only; up to 185 permits may be issued		
...		

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The moose seasons on JBER would begin on September 1 instead of the day after Labor Day. Since Labor Day is on the first Monday of September, this would mean that one to seven additional days would be added to the season, depending on what date Labor Day falls on in any given year. No additional harvest is expected because all harvest is limited through the drawing hunt and the number of permits issued.

BACKGROUND: Many hunting seasons in Unit 14(C) begin the day after Labor Day. When many of these seasons were implemented, it was thought that this would minimize conflicts between hunters and other recreational user groups such as hikers, since outdoor recreation often decreases after Labor Day weekend. Due to access limitations on base, conflicts with other recreational user groups are likely to be minimal. The board may wish to consider changing the start date of all other hunting seasons in Unit 14C that start the day after Labor Day to September 1.

DEPARTMENT COMMENTS: The Department is **NEUTRAL** on this proposal. Moose seasons on JBER are already long, and there is no biological concern to adding a few days of extra opportunity.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 112 – 5 AAC 85.045 (12). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Unit 14(C).

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? Reauthorize the antlerless moose seasons in Unit 14(C).

WHAT ARE THE CURRENT REGULATIONS? The current regulations are:

<u>Units and Bag Limits</u>	<u>Resident Open Season (Subsistence and General Hunts)</u>	<u>Nonresident Open Season</u>
(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
...		
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
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
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 WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

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 14(C) at the desired population objective (1,500 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.

BACKGROUND: Moose in Unit 14(C) 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; Table 112-1). In 2013, we estimated a moose population of approximately 1,533 moose in Unit 14(C) from a combination of population census, composition surveys and extrapolation to unsurveyed areas. At this population level, we have received fewer reports of human-moose conflicts and of winter mortalities. Harvesting cow moose is paramount to maintaining the population at the low end of the objective while providing harvest opportunity.

Antlerless moose hunts must be reauthorized annually. The number of antlerless permits issued depends on the current population estimate and bull:cow ratios, as well as estimated winter mortality.

Table 112-1. Cow moose harvest in Unit 14(C), regulatory years 2013–2017.

Regulatory Year	Either Sex Permits	Antlerless Permits	Cows Harvested
2013	58	23	24
2014	50	26	19
2015	65	25	23
2016	51	26	20
2017	50	26	28

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal to reauthorize antlerless hunts in Unit 14(C). These hunts have been successful in providing additional moose hunting opportunities in the state’s human population center with little controversy. In addition, the harvest of antlerless moose has helped achieve the department’s goal of maintaining moose numbers at the low end of the population objective.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 113– 5 AAC 85.045(a)(5). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Units 7 and 14(C).

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal reauthorizes the antlerless moose season in the Twentymile/Portage/Placer hunt area in Units 7 and 14(C).

WHAT ARE THE CURRENT REGULATIONS? The current regulations are:

Resident	
Open Season	
(Subsistence and	Nonresident

Units and Bag Limits

General Hunts)

Open Season

(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 WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? 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.

BACKGROUND: The moose population in the Twentymile/Portage/Placer area has a history of rapid increase following mild winters, and sharp reductions during severe winters. The number of permits issued (Table 113-1) 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 155 moose with a bull:cow ratio of 31 bulls per 100 cows and a calf:cow ratio of 18 calves per 100 cows.

Table 113-1. Moose harvest in the Twentymile/Portage/Placer hunt area in Units 7 and 14(C), regulatory years 2013-2017.

Regulatory Year	Bull Permits	Antlerless Permits	Bulls Harvested	Cows Harvested
2013	25	20	10	7
2014	40	30	17	10
2015	30	30	11	8
2016	30	30	13	12
2017	30	30	16	6

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal to maintain antlerless hunts in Units 7 and 14(C). These hunts have been successful in creating additional moose hunting opportunities with little or no controversy. In addition, the harvest of antlerless moose has helped achieve the department’s goal of maintaining moose numbers at a level to avoid die-offs during harsh winters.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 114– 5 AAC 85.055 Hunting seasons and bag limits for Dall sheep.

Open a youth drawing hunt for Dall sheep in Unit 14(C).

PROPOSED BY: Ivan Clark

WHAT WOULD THE PROPOSAL DO? This proposal seeks to add a drawing resident youth hunt for any ram to all current Dall sheep drawing hunt areas in Unit 14(C), either from Aug. 1 – Aug. 5 or concurrent with the already established Dall sheep drawing permit season dates. Number of youth permits would be equal to the number of nonresident permits for each hunt area.

This proposal also requests to remove the shared bag limit requirement set forth in AS 16.05.255 for all youth sheep hunts in all general harvest areas, of which there are none in Unit 14C.

WHAT ARE THE CURRENT REGULATIONS? The current regulations are:

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

(7)

...

Unit 14(C), the Eklutna Lake Management Area

1 ram by drawing permit only;
By bow and arrow only; up to 35 permits will be issued

RESIDENT HUNTERS: Day after Labor Day-
1 ram by drawing permit only, Oct. 31
By bow and arrow only (General hunt only)

NONRESIDENT HUNTERS: Day after Labor Day-Oct.31
1 ram by drawing permit only,
By bow and arrow only, every 4 regulatory years

Remainder of Unit 14(C)

RESIDENT HUNTERS: Aug.10-Oct.31
1 ram with full-curl horn or larger (General hunt only)
by drawing permit only; up to 240 permits will be issued total; or

1 ram by bow and arrow only, Oct.1-Oct.10
by drawing permit only; up to (General hunt only)
120 permits will be issued total

NONRESIDENT HUNTERS Aug.10-Oct.31
1 ram with full-curl horn or larger,
Every 4 regulatory years, by drawing permit only; up to 240 permits will be issued total; or

1 ram by bow and arrow only, Oct.1-Oct.10
every 4 regulatory years, by drawing permit only; up to 120 permits will be issued total

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Resident youth hunters would have the opportunity to apply for an any ram draw tag in each of the already established Dall sheep drawing permit areas in Unit 14(C) and depending on season dates may get to pursue Dall sheep for 5 days without adult competition. All youth hunters who pursue Dall sheep in these hunts would be required to be accompanied by a licensed adult who is

21 years of age or older, however the bag limit would not count against the youth and the accompanying adult, as required in statute (AS 16.05.255).

The total number of youth drawing tags would be equal to the number of nonresident tags that are issued each year. Additionally, overall permit numbers would likely need to be adjusted to maintain the allocation set forth in 5 AAC 92.057 (b) (4).

BACKGROUND:

Dall sheep hunts in Unit 14(C) are managed by drawing permit, with separate hunts for residents and nonresidents. Rams less than full curl can only legally be harvested in archery-only permit hunts (DS140, DS141, DS240 and DS241).

Since 2009, the Dall sheep population in Unit 14(C) has exceeded 900 sheep, with the most recent count in 2017 at 1,069 sheep (Figure 114-1). Currently, there are no youth Dall sheep hunting seasons in Unit 14(C). In Unit 14(C) there are 12 nonresident drawing tags that are currently being issued, 4 of which are archery only.

The proposal would add a single resident youth permit hunt to the Northeast, Northwest, Upper Eagle River, and Southwest hunt areas in Unit 14(C). There are no nonresident drawing tags issued in the Central Dall sheep hunt area in Unit 14(C), so no youth tags would be given for that hunt area.

Hunting in all non-weapons restricted (resident and nonresident) hunt areas begins Aug.10, and most areas have multiple hunts with different season dates (Table 114-1). The archery hunts DS140 and DS240 (14C, West) start Oct. 1 with a bag limit of one ram, while DS141 and DS241 (14C, West Eklutna) start on the day after Labor Day with a bag limit of one ram (Table 114-2).

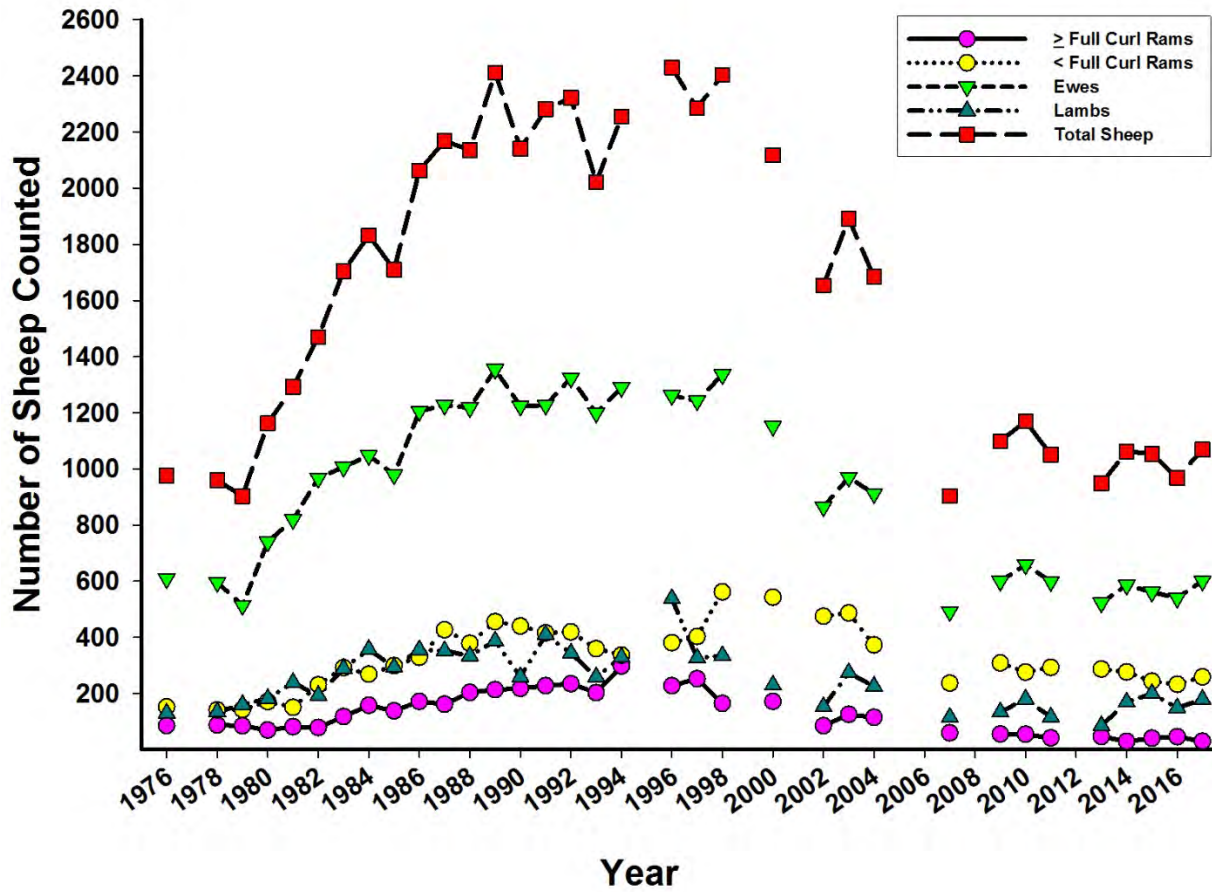


Figure 114-1. 14(C) Dall sheep population 1976 – 2017.

Table 114-1. Total number of 14(C) Dall sheep harvested from RY14 to RY18 for non-weapons restricted drawing hunts.

Reg Year	Central	Northeast	Northwest	Upper Eagle River	Southwest
2014	1	0	4	1	6
2015	0	1	4	1	8
2016	1	3	6	2	5

2017	1	0	4	2	7
2018	0	3	7	2	7
Season Dates	Aug. 10- Sept. 30	Aug. 10- Sept 17	Aug. 10- Sept 17	Aug. 10- Sept 17	Aug. 10- Sept 17

Central: DS123
 Northeast: DS124, DS125, DS126, DS224
 Northwest: DS130, DS131, DS132, DS230, DS231, DS232
 Upper Eagle River: DS134, DS135, DS233
 Southwest: DS136, DS137, DS138, DS236, DS237, DS238

Table 114-2. Total number of Dall sheep harvested from RY14 to RY18 for the 14(C) West Eklutna and 14C West archery hunt areas.

Reg Year	West Eklutna	West
2014	2	1
2015	1	1
2016	2	2
2017	2	7
2018	1	4
Season Dates	Day after Labor Day – Sept. 30	Oct. 1 – Oct. 10

Under the current statute AS 16.05.255, the bag limit taken under a youth hunt must be counted against the bag limits for both child and adult.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because it is allocative in nature.

COST ANALYSIS: Adoption of this proposal would not result in additional costs to the department.

PROPOSAL 115 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.

Establish a separate Dall sheep drawing for second degree of kindred hunters in Unit 14(C).

PROPOSED BY: Anders Gustafson

WHAT WOULD THE PROPOSAL DO? This proposal would create a drawing Dall sheep hunt specifically for nonresident hunters that will be accompanied by resident relatives within the second degree of kindred.

WHAT ARE THE CURRENT REGULATIONS? See Proposal 114. The current Unit 14(C) sheep hunting regulations can be found in 5 AAC 85.055 (7) and in the Alaska Hunting Regulations. Additionally, 5 AAC 92.057 (b) (4) sets maximum allocations of Dall sheep drawing tags in Unit 14(C).

5 AAC 92.057. Special provisions for Dall sheep and mountain goat drawing permit hunts.

...

(b) the department shall issue Dall sheep permits as follows:

...

(4) Unit 14(C): the department shall issue a maximum of five percent of the archery drawing permits to nonresidents and a maximum of 13 percent of the remaining drawing permits to nonresidents;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would create a separate “second degree of kindred” drawing for Dall sheep in Unit 14(C) for the Unit 14(C) West archery hunt area with a season date of Oct 1- Oct.10, the Northwest hunt area with a season date of Aug. 10- Sep. 17, and the Southwest hunt area with a season date of Aug. 10- Sep. 17. Additionally, only nonresidents with a guide-client agreement would be allowed to apply for the Northeast, Upper Eagle River, and the West Eklutna drawing Dall sheep hunt areas in Unit 14(C).

There is presently only one permit issued for each of the nonresident hunts in Unit 14(C), with the exception of DS240 (3 permits). If additional nonresident permits are issued, it would be necessary to also issue additional resident permits in order to remain in compliance with 5 AAC 92.057(b)(4), which states that a maximum of 13% of non-restricted weapons permits in Unit 14(C) may be issued to nonresidents.

BACKGROUND:

In total, there are 62 drawing permits issued for the non-weapons restricted Dall sheep hunts and 85 drawing permits for the archery-only Dall sheep hunts in Unit 14(C). Out of these 147 drawing permits, 4 permits are issued to nonresidents only for the archery hunts and 8 for the non-weapons restricted hunts. These 12 nonresident permits are divided between hunt areas resulting in just 1 permit for many hunt areas (Table 115-1).

Tables 115-2 through 115-4 show the application numbers for guided vs second degree of kindred hunters for Dall sheep in Unit 14(C).

Table 115-1. Unit 14(C) nonresident Dall sheep tag numbers and season dates.

Hunt area	Hunt Number	Number of Nonresident Permits	Current Season dates
Northwest	DS230	1	Aug. 10 - Aug. 22
	DS231	1	Aug. 23 - Sept. 4
	DS232	1	Sept. 5 - Sept. 17
Southwest	DS236	1	Aug. 10 - Aug. 22
	DS237	1	Aug. 23 - Sept. 4
	DS238	1	Sept. 5 - Sept. 17
14C West Archery	DS240	3	Oct. 1 - Oct. 10
14C West Eklutna Archery	DS241	1	Day after Labor Day – Sept. 30
Northeast	DS224	1	Aug. 10 – Aug. 22
Upper Eagle River	DS233	1	Aug. 23 – Sept. 4

Table 115-2. Total number of drawing applications for guided and second degree of kindred Unit 14(C) Dall sheep hunts for RY18.

Hunt area	Hunt Number	total # of guided nonresidents applications	total # of second degree of kindred applications	Who was drawn?	Harvested?
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Northwest	DS230	101	26	G	Y
	DS231	84	6	G	Y
	DS232	68	7	G	Y
Southwest	DS236	198	46	G	Y
	DS237	158	15	K	Y
	DS238	15	27	G	Y
14C West Archery	DS240	38	12	3 G	N
14C West Eklutna Archery	DS241	14	14	G	Y
Northeast	DS224	216	23	G	Y
Upper Eagle River	DS233	89	22	K	N

Table 115-3. Total number of drawing applications for guided and second degree of kindred Unit 14(C) Dall sheep hunts for RY17.

Hunt area	Hunt Number	total # of guided nonresidents applications	total # of second degree of kindred applications	Who was drawn?	Harvested?
Northwest	DS230	326	31	G	N
	DS231	119	2	G	Y
	DS232	11	29	K	N
Southwest	DS236	136	60	G	Y
	DS237	105	9	G	Y
	DS238	28	16	G	Y
14C West Archery	DS240	27	36	1 G, 2 K	1 Y
14C West Eklutna Archery	DS241	23	12	K	N
Northeast	DS224	146	13	K	N
Upper Eagle River	DS233	296	9	G	Y

Table 115-4. Total number of applications for guided and second degree of kindred Unit 14(C) Dall sheep hunts for RY16.

Hunt area	Hunt Number	total # of guided nonresidents applications	total # of second degree of kindred applications	Who was drawn?	Harvested?
Northwest	DS230	115	18	G	Y
	DS231	95	4	G	N
	DS232	10	7	K	N
Southwest	DS236	70	35	K	N
	DS237	55	14	K	N
	DS238	8	11	G	Y
14C West Archery	DS240	12	8	1 G, 2 K	N
14C West Eklutna Archery	DS241	5	5	G	N
Northeast	DS224	65	5	G	Y
Upper Eagle River	DS233	168	9	G	Y

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because this proposal is allocative in nature.

COST ANALYSIS: The adoption of this proposal would not result in significant costs to the department.

PROPOSAL 116

5 AAC 85.020 Hunting seasons and bag limits for brown bear.

5 AAC 92.132 Bag limit for brown bears.

Change the brown bear hunt in Unit 14(C) Remainder to a registration hunt with a bag limit of one bear every year.

PROPOSED BY: Resident Hunters of Alaska

WHAT WOULD THE PROPOSAL DO? This proposal seeks to change the hunt type from a general season hunt to a registration hunt structure and change the bag limit from one brown bear every 4 years to one brown bear every year.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 85.020(a)(13). Hunting seasons and bag limits for brown bear.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
... Unit 14(A), and the remainder of 14(C)	Sept. 1-May 31	Sept. 1-May 31
1 bear every 4 regulatory years	(General Hunt Only)	
...		

5 AAC 92.132 Bag limit for brown bears states that a person may not take more than one brown bear every four regulatory years, except in the Units listed under (1) which allow one brown bear to be taken every year.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If adopted this proposal would change the hunt structure for brown bear in Unit 14(C) Remainder from a general season hunt to a registration hunt while also changing the bag limit from one brown bear every 4 regulatory years to one brown bear every regulatory year

BACKGROUND: Over the past 10 regulatory years (2008-2017) harvest of brown bears in Unit 14(C) Remainder has averaged approximately 2 brown bears per year with the highest harvest of 5 in 2017 and lowest harvest of 0 in 2016. Of the 18 brown bears harvested (13 by residents, 5 by nonresidents) in Unit 14(C) Remainder since 2008, 72% have been males. Access to 14(C) Remainder is difficult and mainly by foot, with some limited access by boat or airplane. Over the last 5 years, there have been 3 brown bears killed by agencies in the Remainder of Unit 14(C) and no brown bears have been reported killed in defense of life or property.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because any additional harvest is likely sustainable. If adopted, the department prefers a general season hunt rather than the proposed registration permit hunt. Registration hunts are used is to allow managers to close hunts quickly if a harvest limit or quota is reached, and this hunt is not expected to result in any additional harvest, therefore a registration hunt is not necessary.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional cost to the department.

PROPOSAL 117 – 5 AAC 85.015. Hunting seasons and bag limits for black bear.

Extend the hunting season for black bear in the Joint Base Elmendorf-Richardson Management Area in Unit 14(C).

PROPOSED BY: Joint Base Elmendorf-Richardson (JBER)

WHAT WOULD THE PROPOSAL DO? This proposal seeks to lengthen the hunting season for black bear on JBER under permit DL455.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 85.015(3) allows black bear hunting on JBER under drawing permit DL455 from April 15-June 15 for both residents and nonresidents.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The hunting season on JBER for permit DL455 would be lengthened to Sept. 1-June 15 providing a fall season where one currently does not exist.

BACKGROUND: Hunt DL455 was established in regulatory year 2016. In both regulatory years 2016 and 2017 32% of the 25 permitted hunters participated in the hunt with a harvest of 3 black bears in 2016 and 1 black bear in 2017. This hunt, like all hunts on JBER, is subject to training closures and large portions of the hunting season may be lost.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because there are no conservation concerns related to extending the black bear season because the harvest is controlled by drawing permit.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional cost to the department.

PROPOSAL 118– 5 AAC 85.015. Hunting seasons and bag limits for black bear, and 5 AAC 92.530(3)(B) Management areas.

PROPOSED BY: Anchorage Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal seeks to create a registration black bear hunt in the McHugh Creek portion of moose hunt area DM666 in Unit 14(C).

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 85.015. Hunting season and bag limits for black bear.

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

Unit 14(C), JBER Management Area

1 bear every regulatory year, By drawing permit only; by Shotgun only; up to 25 permits May be issued	April 15 – June 15 (General hunt only)	April 15 – June 15
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Remainder of Unit 14(C)	No closed season (General hunt only)	No closed season
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1 bear

...

5 AAC 92.530(3). Management areas.

...

(3) the Anchorage Management Area

(B) the Anchorage Management Area is closed to hunting, except that

(i) moose hunting is allowed by permit only;

(ii) small game and waterfowl may be taken by falconry, except that waterfowl may not be taken in the Ship Creek drainage west of Post Road;

(iii) deleterious exotic wildlife may be taken by air rifle with rifled barrel, bow and arrow (with blunts or other special small game points), and falconry only;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Black bear hunting would be allowed in the Anchorage Management Area under a registration permit on weekdays from September 5 - May 31, by shotgun or muzzleloader only, in the McHugh Creek portion of moose hunt area DM666.

BACKGROUND: Much of Unit 14(C) is open to black bear hunting, but hunts are in areas of the unit that may be difficult to access. There is interest in additional opportunities closer to the developed areas of Anchorage. The only other drawing black bear hunt in Unit 14(C) is DL455, which was established in 2016 and is held on Joint Base Elmendorf-Richardson (JBER). Twenty-five tags are issued annually for this hunt. In 2016, 340 applications were received for DL455 and 523 were received in 2017.

Moose hunting is allowed by permit in two separate hunt areas (the McHugh Creek portion and the Upper Campbell Creek portion) in the Anchorage Management Area under DM666. In order to use the DM666 permit, hunters must attend and pass a proficiency shoot administered by the

Department. The moose hunt is held during the month of November, a time when there are fewer other trail users than at many other times of the year. Proposed season dates for this bear hunt overlap more with higher use times of the same area. Moose hunting is only allowed on weekdays, and hunters must check in and out every day. These conditions were established in order to minimize conflicts with other trail users, and many of the same conditions would most likely be implemented for any black bear hunt in the same areas.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal.

Should the Board adopt this proposal, the department prefers to administer a hunt of this nature as a drawing hunt rather than by registration permit. This will allow for better control of the hunt and hunters in these areas. This is of concern given the high visibility of hunting in this area.

The board may also wish to adjust the September opening date to September 1 to reduce regulatory complexity for hunters.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 119– 5 AAC 85.015. Hunting seasons and bag limits for black bear and 5 AAC 92.530(3)(B) Management areas.

PROPOSED BY: Anchorage Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal seeks to create a registration black bear hunt in the Upper Campbell Creek portion of moose hunt area DM666.

WHAT ARE THE CURRENT REGULATIONS? See proposal 118 for 5 AAC 85.015 and 5 AAC 92.530(3).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Black bear hunting would be allowed in the Anchorage Management Area under a registration permit on weekdays from September 5 - May 31 by shotgun or muzzleloader only, in the Upper Campbell Creek portion of moose hunt area DM666.

BACKGROUND: Much of Unit 14(C) is open to black bear hunting, but much of it is in areas of the unit that may be difficult to access. There is interest in additional opportunities closer to town. The only other drawing black bear hunt in Unit 14(C) is DL455, which was established in 2016 and is held on Joint Base Elmendorf- Richardson (JBER). Twenty-five tags are issued annually. In 2016, 340 applications were received for DL455 and 523 were received in 2017.

Currently, moose hunting is allowed by permit in two separate hunt areas (the McHugh Creek portion and the Upper Campbell Creek portion) in the Anchorage Management Area under

DM666. In order to use the DM666 permit, hunters must attend and pass a proficiency shoot administered by the Department. The moose hunt is held during the month of November, a time when there are fewer other trail users than at many other times of the year. Proposed season dates for this bear hunt overlap more with higher use times of the same area. Hunting is only allowed on weekdays, and hunters must check in and out every day. These conditions were established in order to minimize conflicts with other trail users, and many of the same conditions would most likely be implemented for any black bear hunt in the same areas.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal.

Should the Board adopt this proposal, the department prefers to administer a hunt of this nature as a drawing hunt rather than by registration permit. This will allow for better control of the hunt and hunters in these areas. This is of concern given the high visibility of hunting in this area.

The board may also wish to adjust the September opening date to September 1 to reduce regulatory complexity for hunters.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

Draft analysis and recommendations for Proposals 120-121 are pending and will be posted on the Board of Game's website at

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 122– 5 AAC 92.003. Hunter education and orientation requirements.

PROPOSED BY: Joint Base Elmendorf-Richardson

WHAT WOULD THE PROPOSAL DO? This proposal seeks to require basic hunter education for small game hunting in the Joint Base Elmendorf-Richardson (JBER) Management Area.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 92.003 requires hunters born after January 1, 1986 to have basic hunter education prior to hunting in Units 7, 13, 14, 15, and 20.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? All small game hunters wishing to hunt in the JBER Management Area would have to complete a hunter education course for which a certification of completion is issued prior to hunting.

BACKGROUND: For this proposal to have the desired effect, 5 AAC 92.530(1)(B) would need to be modified because that is how other management area specific restrictions concerning hunter education requirements are implemented under this provision.

For example, hunter education is required, regardless of age, in a number of special hunt areas in Alaska, including:

- Eagle River Management Area (14C, bears and small game)
- Eklutna Lake Management Area (14C, bears)
- Anchorage Coastal Wildlife Refuge (14C)
- Mendenhall Wetlands State Game Refuge (1C)
- Palmer/Wasilla Management Area (14A, shotgun for big game)

It is also required, regardless of age, as a requirement for particular drawing permits:

- JBER moose hunts (DM421-DM424, DM426-DM428, and DM430)
- JBER black bear hunt (DL455)

Specific hunter education requirements are often required in areas where hunting is allowed near areas with high human population densities and therefore a higher chance of interaction between hunters and nonhunters.

The only hunting that occurs in the JBER management area that requires hunter education are the hunts for moose and black bear through draw hunt permit conditions.

DEPARTMENT COMMENTS: The Department is **NEUTRAL** on this proposal.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 123 – 5 AAC 84.070. Hunting seasons and bag limits for unclassified game.

PROPOSED BY: Joint Base Elmendorf-Richardson

WHAT WOULD THE PROPOSAL DO? This proposal would allow for the take of unclassified game in the Joint Base Elmendorf-Richardson (JBER) Management Area of Unit 14(C).

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 85.070 (1) sets the bag limit and season dates for shrew, mouse, and porcupine (unclassified game) to no limit and no closed season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would add unclassified game with small game and fur animals in the JBER Management Area as being open to harvest.

BACKGROUND: For this proposal to have the desired effect, 5 AAC 92.530 (1) (B) needs to be modified to the following:

“(B) the area is open to the taking of big game by permit only; and **unclassified game**, and small game, and fur animals...”

JBER wildlife conservation staff would like to have the option of lethally taking porcupines primarily when they are damaging equipment and facilities. Currently, this is done through a depredation permit issued by the Department upon request from JBER wildlife conservation.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal and has no biological concerns for unclassified game.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 124– 5 AAC 84.270. Furbearer trapping.

PROPOSED BY: Bradley Christensen

WHAT WOULD THE PROPOSAL DO? This proposal seeks to extend the trapping season for beaver in Unit 14(C).

WHAT ARE THE CURRENT REGULATIONS? The Unit 14(C) beaver trapping regulations can be found in 5 AAC 84.270.

Species and Units	Open Season	Bag Limit
(1) Beaver		
...		
Unit 14(C), that portion within the of drainages of Glacier Creek, Kern Creek, the Twentymile River, and the drainages of Knik River outside Chugach State Park, the Birchwood Management Area, and the Joint Base Elemendorf-Richardson Management Area	Dec. 1 – Apr. 15	20 per season
Reminder of Unit 14(C)	No open season	
...		

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Beaver trapping season in Unit 14(C) would be extended to April 30. This may increase harvest slightly, but we do not anticipate any drastic changes.

BACKGROUND: There is very little trapping pressure or harvest of beaver in Unit 14(C). Since RY13, only 15 beavers have been sealed.

DEPARTMENT COMMENTS: The Department is **NEUTRAL** on this proposal because there are no biological concerns with the beaver population in Unit 14(C).

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 125– 5 AAC 92.530(11). Management Areas.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal seeks to modify the boundary for the Birchwood Management Area in Unit 14(C).

WHAT ARE THE CURRENT REGULATIONS? The management area regulations can be found in 5 AAC 92.530.

...

(2) the Eagle River Management Area:

(A) the area consists of the eagle River drainage upstream from the Glenn Highway in Unit 14(C);

...

(11) the Birchwood Management Area:

(A) the area consists of all land bounded on the south and west by Eagle River and the Joint Base Elmendorf-Richardson (JBER) Military Reservation, on the east by the [OLD GLEN] **Glenn** Highway, and on the north by Peters Creek;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The eastern boundary for the Birchwood Management Area would move from the Old Glenn Highway to the Glenn Highway. This would also result in a slight increase in the Eagle River Management Area and decrease in the Birchwood Management Area.

BACKGROUND: As currently worded in the codified regulations, the Eagle River Management Area and the Birchwood Management Area overlap in the section of the Eagle

River drainage between the Glenn Highway and the Old Glenn Highway. There is no hunting in that section, regardless of which management area it falls in.

DEPARTMENT COMMENTS: The Department submitted and **SUPPORTS** this proposal, since it simply clarifies a boundary to reduce confusion for land managers.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

Draft analysis and recommendations for Proposals 126-130 are pending and will be posted on the Board of Game's website at

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 131 – 5 AAC 85.045(11). **Hunting seasons and bag limits for moose.** Reauthorize the antlerless moose seasons in Unit 13.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal reauthorizes the antlerless moose hunts in Unit 13; these hunts must be re-authorized annually by the Board to comply with statutory requirements.

WHAT ARE THE CURRENT REGULATIONS? The department is authorized to issue up to 200 drawing permits for antlerless moose hunts in Unit 13 for an October 1–31 and March 1–31 season. Hunters are prohibited from taking calves and cows accompanied by a calf.

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;	Oct. 1—Oct. 31 Mar. 1—Mar. 31 (General hunt only)	No open season

a person may not take a calf or a cow accompanied by a calf

...

The board has made a positive customary and traditional use finding for moose in all of Unit 13, with an amount reasonably necessary for subsistence of 300–600 moose for the entire game management unit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal reauthorizes the antlerless moose hunts in Unit 13 for 2019 the regulatory year; these hunts are needed to keep the moose population within intensive management objectives and provide additional hunting opportunity for residents.

BACKGROUND: The Unit 13 antlerless hunt was established in March 2011 and the first Unit 13 antlerless hunt under this regulation took place in September 2012. Ten permits have been issued annually for a single hunt area in the western portion of Unit 13A. This hunt resulted in the harvest of four cow moose during the 2012 season, two during the 2013 season, seven during the 2014 season, seven during the 2015 season, five during the 2016 season, and eight during the 2017 season.

During the 2013 Board of Game meeting in Wasilla, the board adopted a proposal that changed the hunt from September 1–20 to October 1–31 and March 1–31. These new season dates were implemented in the fall of 2014, after which harvest success appears to have increased.

The board has also directed the department to issue antlerless moose permits when the moose population is at or above the midpoint of the population objective with the goal of harvesting up to 1% of the cow moose population. The current population objective for Unit 13A is 3,500–4,200, and the population was estimated to be above objective in 2015 and 2016, and within objectives in 2017. The antlerless hunt in western Unit 13A contributes to maintain the moose population within the intensive management objectives. The additional harvest provided through this hunt will also assist in achieving the harvest objectives for the population.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. Antlerless moose hunts must be re-authorized annually by the board to comply with statutory requirements. These hunts are required to regulate the moose population within the established Intensive Management (IM) objectives for population size and harvest.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 132– 5 AAC 85.045 Hunting seasons and bag limits for moose. Reauthorize the antlerless moose draw permits in Units 14A and 14B and increase permit levels in Unit 14A.

PROPOSED BY: Alaska Department of Fish & Game

WHAT WOULD THE PROPOSAL DO? This proposal reauthorizes the antlerless moose hunts in Units 14A and 14B; these hunts must be re-authorized annually by the Board to comply with statutory requirements.

WHAT ARE THE CURRENT REGULATIONS?

- The department has the authority to issue up to 2,000 drawing permits to resident hunters in Unit 14A with a bag limit of one antlerless moose. The season is August 20–September 25 for DM400–DM412 and November 1–December 25 for DM413.
- The department may also issue up to 200 permits to resident hunters for the targeted hunt in Unit 14A with a bag limit of one moose during a winter season to be announced by emergency order.
- The department may also issue up to 100 additional permits to resident hunters for a targeted hunt in Unit 14B with a bag limit of one moose during a winter season to be announced by emergency order.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal reauthorizes the antlerless moose hunts in Units 14A and 14B; these hunts are needed to keep the moose population within management objectives and provide additional hunting opportunity for residents. The targeted hunt also provides managers with a tool to reduce moose-vehicle collisions and address nuisance moose issues.

BACKGROUND: Moose surveys conducted in February 2017 provided an estimate of 8,700 moose in Unit 14A. This is similar to the 2013 population estimate and is greater than the population objective of 6,000–6,500 moose. Twinning surveys conducted in the spring of 2018 showed a twinning rate of 26%: this is indicative of a population that is still increasing.

The number of antlerless permits available was raised in spring of 2011 from 400 to 1,000. Due to the heavy snows that same winter, there were no antlerless permits issued in 2012. Subsequent surveys indicated that the moose population was not adversely affected by the winter of 2011 and was continuing to grow. The number of permits available has been increasing and was raised to the limit of 1,000 permits for the fall of 2017. In spring of 2018 the board increased the permit levels to 2,000 permits and 1,302 permits were issued for RY18. The success rate for hunters under the antlerless permits has remained steady at about 67% over the past five years.

The targeted moose hunt in Units 14A and 14B provide an additional tool to address public safety concerns related to moose-vehicle collision and nuisance management issues. The AM415 targeted hunt has been in place since 2012. Under this permit, hunters are either designated a specific nuisance moose to take, or are assigned one of four areas where a high number of moose–vehicle collisions are known to occur. In this scenario permits are issued as snow increases and moose become more prevalent along roadways. The winter of 2014 was very mild with almost no snow. As a result, only 20 permits were issued that year. No permits were issued in the winter of 2017. Excluding 2014 and 2017, on average 143 permits have been issued and 110 moose have been taken, providing an average success rate of 77%.

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 in the number of moose-human conflicts, and moose may experience nutritional stress, particularly during severe winters.

Browse surveys completed in the spring of 2016 demonstrated a removal rate of 37.13% ($\pm 6.9\%$ at the 95% CI). This offtake indicated a relatively high proportion of commonly browsed plants in the unit are being consumed, suggesting the moose population in Unit 14A may be approaching their carrying capacity. Browse surveys were conducted at the end of a winter which had little snowfall, and browsing appeared to be more evenly distributed than in what would be found in a 'typical' year.

Moose-vehicle collisions result in property damage and may result in human injury or death. An average of 281 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. The department also receives periodic complaints from the public about crop depredation and aggressive behavior that can be mitigated by this hunt structure.

The Department uses the targeted hunts to mitigate public safety concerns by issuing permits to selected hunters and assigning them to hunt areas that correspond with areas of high moose-vehicle collisions or reoccurring nuisance issues.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. Antlerless moose harvests are warranted to control the moose population's growth and reduce moose-human conflicts in the Mat-Su Valley. These hunts also provide additional moose hunting opportunity in the Mat-Su Valley.

COST ANALYSIS: Adoption of this proposal would not result in significant costs to the department.

Draft analysis and recommendations for Proposal 133 are pending and will be posted on the Board of Game's website at <http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.

PROPOSAL 134 – 5 AAC 85.045(15). Hunting seasons and bag limits for moose.
Reauthorize the antlerless moose season in Unit 17A.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal reauthorizes the antlerless moose seasons for the Unit 17A.

WHAT ARE THE CURRENT REGULATIONS? The current regulations for the Unit 17A moose hunt allow resident hunters a bag limit of two moose per regulatory year under registration permits, however only 1 moose can be taken during the fall season. Nonresidents are restricted to a bag limit of one bull moose with antler restrictions by drawing permit.

- There are three fall hunts, one of which allows the harvest of an antlerless moose:
 - Registration permit (RM573), for resident hunters only with a bag limit of one bull moose, Aug 25–Sept 25;
 - Registration permit (RM571), for resident hunters only with a bag limit of one antlerless moose, Aug 25–Sept 25;
 - Drawing permit (DM570 - up to 20 permits are available), for non-resident hunters only, with a bag limit of one bull moose with 50” antlers or antlers with 4 or more brow tines on at least one side, Sept 5–Sept 15.
- There are two winter hunts, open to resident hunters only, one of which allows for the harvest of antlerless moose.
 - Registration permit (RM575), with a bag limit of one antlered bull moose;
 - Registration permit (RM576), with a bag limit of one antlerless moose.
 - Winter hunt season dates for the winter hunts are as follows: “up to a 31-day season may be announced December 1–the end of February”. The seasons are opened concurrently by emergency order when good snow conditions exist for winter travel.

There is a positive customary and traditional use finding for moose in Unit 17, and an amount reasonably necessary for subsistence of 100–150 moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reauthorize the antlerless moose hunts in Unit 17A. These antlerless hunts would continue to provide hunters with additional harvest opportunity while helping managers by limiting the growth of the Unit 17A moose population that is already beyond the upper limit of our population objectives.

BACKGROUND: Moose are relative newcomers to much of Unit 17A, with only about 35 animals being present along the eastern border in 1980. Since then, moose have continued to increase in population size and expand throughout Unit 17A and west into Unit 18. Minimum counts of moose in Unit 17A were conducted in 14 different years during the period of 1991–2011, revealing a steady increase in moose numbers over time, with 1,166 moose counted in March 2011. During 2012–2015, surveys were not conducted due to inadequate snow conditions. Beginning in fall 2016, a Geospatial Population Estimator (GSPE) replaced the minimum count

for enumerating moose in Unit 17A. In spring 2017, this survey technique produced an estimate corrected for sightability (1.2) of 2,370 moose, (\pm 563). The uncorrected estimate was 1,990 moose (\pm 437).

Moose management in Unit 17A has been guided by the Unit 17A Moose Management Group, consisting of members 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. This group produced a Unit 17A Moose Management Plan that went through several iterations during 1996–2013, with the 2013 plan being used as the guiding document today. This plan has goals and objectives for hunter opportunity, harvest allocation, habitat mapping and population monitoring. The population objective for Unit 17A listed in the plan is 800–1,200 moose.

A drawing hunt for nonresident hunters was adopted by the board in 2013, with fall 2014 being the first year of that hunt. The impetus behind the nonresident hunt was abundant harvest opportunity provided by this growing moose population, and objectives within the moose management plan that provide for the nonresident opportunity when the moose population exceeds 1,000 animals and is at a stable or increasing trend.

The winter antlerless hunt was adopted by the board and initiated in RY13 that allows for an antlerless harvest when the moose population is above 600 animals and is stable or increasing. During the five years of the RM576 antlerless hunt (RY13-RY17), 73 antlerless moose have been taken (66 cows and 7 bulls), for an average of ~13 cows/year.

Because of the concerns with the increasing moose numbers in Unit 17A that are already well above population objectives, a proposal was adopted by the board during their spring 2018 meeting in Dillingham, to open a fall antlerless hunt in fall 2018 to increase harvest on the female segment of the population. During the first year of this hunt in fall 2018, 8 antlerless moose were harvested, all were cows.

During RY2013–2017 the mean annual moose harvest in Unit 17 was 303 moose.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. The moose population in this unit is above the upper limit of the population objective. Allowing a small harvest of antlerless moose will help limit population growth while providing additional harvest opportunity for hunters.

COST ANALYSIS: Adoption of this proposal would not result in significant costs to the department.

PROPOSAL 135 – 5 AAC 85.045(18) Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose hunting seasons in Unit 20A.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? Reauthorize the antlerless moose hunting seasons in Unit 20A.

WHAT ARE THE CURRENT REGULATIONS?

Unit 20A Ferry Management Trail, Wood River Controlled Use, and the Yanert Controlled Use Areas

Residents:

- Drawing permit for one antlerless moose, August 15–November 15.
- Targeted hunt for one moose by permit (AM751) announced by emergency order.

Nonresidents:

- No antlerless moose seasons

Unit 20A remainder

Residents:

- Drawing permit for one antlerless moose, August 15–November 15.
- Registration permit for one antlerless moose, August 25–February 28, permits for most of Unit 20A have not been issued for several years because harvest is being obtained with drawing permits. Registration permit, RM768, has been issued to provide reasonable opportunity to harvest antlerless moose for subsistence uses; this hunt occurs outside the Fairbanks Nonsubsistence Area.

Nonresidents:

- No antlerless moose seasons

Hunts for bull moose are also available in other portions of Unit 20A. Refer to the *2018–2019 Alaska Hunting Regulations* for specific details about moose hunting seasons in Unit 20A.

There is a positive C&T finding for moose in Unit 20A outside the boundaries of the Fairbanks Nonsubsistence Area with an ANS of 50–75 moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The Alaska Department of Fish and Game (department) will have the authority to use antlerless hunts as a management tool to regulate the moose population in Unit 20A.

BACKGROUND: Antlerless moose hunting seasons must be reauthorized annually. The purposes of antlerless moose hunts in Unit 20A are 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 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 and harvest will be provided by utilizing a harvestable surplus of antlerless moose. The antlerless harvest will help in meeting IM harvest objectives without reducing bull:cow ratios to low levels. Meat and subsistence hunters will benefit from the opportunity to harvest cow moose. The moose population 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 the Unit 20A population at roughly 12,000 moose while continuing to monitor nutritional condition. In 2015, the post-hunt moose population estimate was 12,315 (10,622–14,009 @ 90% confidence interval). This high-density moose population (approximately 2.5 moose/mi²) continues to experience density-dependent effects, including low productivity and relatively light short-yearling weights of females. Although sporadic signs of improvement in nutritional condition have been observed (i.e., higher twinning rates in 2017 and 2018 and increases in short-yearling weights of males in 2015–2016 compared to the late 1990s through early 2000s), no clear signals or significant trends have yet been detected. The department recommends continued antlerless hunts in regulatory year 2019 to regulate population growth (i.e., stabilize the population at 12,000 moose).

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal because antlerless harvests are an important management tool in regulating this high-density, nutritionally-stressed moose population. If antlerless moose hunts are not reauthorized, the department will lose the ability to regulate this moose population and our ability to meet intensive management harvest objectives will be compromised. Additionally, the public will lose an opportunity to hunt a harvestable surplus of cow moose, and 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.

COST ANALYSIS: Adoption of this proposal would not result in additional costs for the department.

PROPOSAL 136 – 5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.
Reauthorize antlerless moose seasons in Unit 20B

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? Reauthorize antlerless moose hunting seasons in Unit 20B.

WHAT ARE THE CURRENT REGULATIONS? Antlerless moose hunts are available in Unit 20B by drawing, registration, or targeted permit only, as follows:

Creamer’s Field within the Fairbanks Management Area

Residents and nonresidents:

- 1 antlerless moose by drawing permit, by bow and arrow only, up to 150 permits, a recipient is prohibited from taking an antlered bull in the Fairbanks Management Area, September 1–November 27;
- 1 antlerless moose by muzzleloader by drawing permit, up to 10 permits, a recipient is prohibited from taking an antlered bull in the Fairbanks Management Area, Dec 1–January 31.

Remainder of the Fairbanks Management Area

Residents and nonresidents:

- 1 antlerless moose by drawing permit, by bow and arrow only, up to 150 permits, a recipient is prohibited from taking an antlered bull in the Fairbanks Management Area, September 1–November 27

Residents only:

- 1 moose by targeted permit by shotgun, crossbow or bow and arrow only, up to 100 permits, season to be announced by emergency order

Minto Flats Management Area

Residents only:

- 1 antlerless moose by registration permit, October 15–February 28

Middle Fork of the Chena River drainage

Residents only:

- 1 antlerless moose by drawing permit, up to 300 permits, taking of calves or cows with calves is prohibited, August 15–November 15
- 1 antlerless moose by registration permit, taking of calves or cows with calves is prohibited, October 1–February 28

Southeast of the Moose Creek dike within ½ mile each side of the Richardson Highway

Residents only:

- 1 moose by drawing permit, by bow and arrow, crossbow, or muzzleloader, up to 100 permits, September 16–February 28
- 1 moose by targeted permit by shotgun, crossbow, or bow and arrow only, up to 100 permits, season to be announced by emergency order

Remainder of Unit 20B

Residents only:

- 1 antlerless moose by drawing permit, by youth hunt only, up to 200 permits, August 5–14;
- 1 antlerless moose by drawing permit, up to 1,500 permits, taking of cows with calves is prohibited, August 15–November 15

- 1 moose by targeted permit by shotgun, crossbow, or bow and arrow only, up to 100 permits, season to be announced by emergency order.

Hunts for bull moose are also available in Unit 20B. Refer to the *2018–2019 Alaska Hunting Regulations* for specific details about moose hunting seasons in Unit 20B.

There is a positive C&T finding for moose in Unit 20B, within the Minto Flats Management Area, with an ANS of 20 – 40 moose.

There is a positive C&T finding for moose in Unit 20B, outside the boundaries of the Minto Flats Management Area and outside the boundaries of the Fairbanks Nonsubsistence Area, with an ANS of 75–100 moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Antlerless hunts will continue to be available to hunters, and the department will continue to have the authority to use antlerless hunts as a tool to regulate the moose populations.

BACKGROUND: 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, provide hunting opportunity, help 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 hunts are not reauthorized, 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 and meat hunters in the Fairbanks Nonsubsistence Area will not have the opportunity to harvest cow moose.

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 harvest ticket 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 our intended harvest.

Extensive burns in northcentral Unit 20B will provide high quality moose 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.

Fairbanks Management Area (FMA) – The purposes of these antlerless hunts are 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 Regulatory Year 1999 (RY99; that is, RY = 1 July 1999–30 June 2000) through

RY10. Moose–vehicle collisions and moose nuisance problems declined during RY06–RY15, presumably in part due to the consistent antlerless moose harvests during RY09–RY15.

Minto Flats Management Area (MFMA) – The primary purposes of this antlerless hunt are 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 showed a more sustainable density (2.6 moose/mi²) in the MFMA. The 2017 estimate now indicates densities are at approximately 1.7 moose/mi². The antlerless harvest in this area is intended to stabilize this population, therefore we intend to only harvest antlerless moose at about 1% of the total population to maintain the current population size.

Targeted Hunts – The purpose of the targeted hunts is primarily to reduce moose–vehicle collisions by harvesting moose that habitually spend time along roadways and have a high likelihood of being injured by highway vehicles or have already been injured. We also use targeted hunts as an option for resolving nuisance situations. These permits are used sparingly but allow the public to harvest specific moose instead of the department 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 help meet the IM harvest objectives for Unit 20B. The 2018 population estimate (12,871 moose SE = 1,289, 90% CI= 10,750-14,991) indicated the population declined from the 2009 estimate (20,173 moose) to a level within our objective of 12,000–15,000 moose. Because the population estimate is within our objectives we currently recommend not conducting these hunts at this time, but would still like to have the authority to conduct these hunts if new population estimates indicate they would be appropriate.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. There are no biological concerns associated with the harvest of antlerless moose taken under these regulations; however, eliminating hunts would create a biological concern, and the board should also consider whether a reasonable opportunity for subsistence uses on populations with positive C&T findings would still be provided. The Unit 20B moose population has potential for growth due to the extensive burns (i.e., increased productivity) and high survival rates. If antlerless moose hunts are not reauthorized, the moose population may exceed carrying capacity and would require population reduction. These hunts maintain the opportunity to hunt a harvestable surplus of cow moose, and help to meet IM harvest objectives.

COST ANALYSIS: Approval of this proposal is not expected to result in additional costs for the department.

PROPOSAL 137 – 5 AAC 85.045(a)(18). Hunting seasons and bag limits for moose.
Reauthorize antlerless moose hunting seasons in Unit 20D.

PROPOSED BY: Alaska Department of Fish & Game

WHAT WOULD THE PROPOSAL DO? Reauthorize antlerless moose hunting seasons in Unit 20D.

WHAT ARE THE CURRENT REGULATIONS? Unit 20D currently has antlerless hunts available by drawing permit only, and fewer than 30 permits are issued each year. Antlerless moose (except a cow accompanied by a calf or a calf) seasons in Unit 20D are listed below. All these hunts occur in the Fairbanks Nonsubsistence Area:

- Bison Range Controlled Use Area Youth Moose Hunt (YM792)
 - youth hunters (ages 10–17) who are residents or nonresident children of residents
 - September 1–30
 - one bull per lifetime, with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on at least one side, or one antlerless moose; however, a calf or cow accompanied by a calf may not be taken
- Purple Heart Recipient Hunt (DM795)
 - qualified Purple Heart recipient resident and nonresident hunters
 - September 1–15
 - one moose every 4 years; however, a calf or cow accompanied by a calf may not be taken
- Unit 20D in southwestern Unit 20D, excluding the Delta Junction Management Area (DM791)
 - resident hunters
 - October 10–16
 - one antlerless moose; however, a calf or cow accompanied by a calf may not be taken

In addition to these drawing hunts, there are registration hunts in regulation that have not been offered, but that are retained in case the department determines that additional management action is needed to reduce or maintain the moose population by increasing antlerless harvest.

Hunts for bull moose are also available in Unit 20D. Refer to the *2018–2019 Alaska Hunting Regulations* for specific details about moose hunting seasons in Unit 20D.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If adopted, this proposal would allow the department to continue to provide harvest tools and options for moose management in Unit 20D and allow hunters to take a harvestable surplus of antlerless moose (except a calf or a cow accompanied by a calf) in the Bison Range Controlled Use Area Youth Moose Hunt, the hunt by Purple Heart recipients, and the Southwestern Unit 20D drawing hunt.

BACKGROUND: Antlerless moose hunting seasons must be reauthorized annually. The goals of the antlerless hunts are to stabilize population growth in Unit 20D and to address concerns about range degradation, reduced nutritional conditions, and reduced reproductive success. These antlerless moose hunts will likely improve or maintain the ability of moose habitat to support the current moose population. Hunting opportunity and harvest could increase and the additional harvest could contribute to meeting Intensive Management (IM) harvest objectives.

Meat hunters will benefit from the opportunity to harvest cow moose. Moose populations will benefit by having moose densities compatible with their habitat. Delta Junction residents and motorists may benefit from reduced moose–vehicle collisions and moose–human conflicts.

Antlerless hunts help regulate moose population growth and achieve IM objectives for high levels of harvest. Continued antlerless hunts are likely needed to maintain the population at the optimal density and will contribute toward meeting the IM harvest objective of 500–700. However, registration permits will only be issued if additional harvest is needed in specific areas to maintain optimal moose densities. With the exception of the Bison Range Controlled Use Area Youth Moose Hunt and the hunt by Purple Heart recipients, antlerless permits were not issued during RY09–RY15. In RY16 and RY17, we issued 12 antlerless drawing permits (DM791). In RY18 we issued 14 DM791 permits.

The antlerless moose hunts and their effect on moose density and population growth will continue to be evaluated. Three indices of density-dependent moose nutritional conditions (biomass removal of current annual growth on winter browse, proportion of females with twin calves, and late-winter calf weights) will be evaluated in relation to changes in moose density. Antlerless moose hunts for Unit 20D will continue to be implemented as needed based on this evaluation. The total number of permits in RY19 will continue to be fewer than 30.

The moose population in Unit 20D reached the IM objective of 8,000–10,000 animals in 2006. The highest density was in southwestern Unit 20D at 5.6 moose/mi². The population in this area was exhibiting the effects of increased competition for food, with a moderately-low, 2-year average twinning rate of 14%. Antlerless hunts during RY06–RY09 contributed to reducing the density in southwestern Unit 20D to 3.9 moose/mi². Overwinter browse utilization decreased from 25% in 2007 to 15% in 2010. The average weight of 9 month-old calves increased from 340 lb in 2010 to 366 lb in 2012 (K. Seaton, ADF&G, unpublished data, Fairbanks).

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal.

There are no biological concerns regarding continued antlerless hunts. However, there are biological concerns regarding overpopulation if antlerless hunts are eliminated. The Unit 20D moose population has great potential for growth due to the extensive agricultural land, burns, and high predator harvest. If antlerless moose hunts are not reauthorized, the moose population may exceed carrying capacity and need reduction when new data are available. These hunts offer an opportunity to hunt a harvestable surplus of cow moose and meet IM harvest objectives.

COST ANALYSIS: Adoption of this proposal would not result in additional costs for the department.

PROPOSAL 138 – 5 AAC 85.045(24). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Unit 26A.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal reauthorizes the antlerless moose season in the western portion of Unit 26A.

WHAT ARE THE CURRENT REGULATIONS? Antlerless moose hunts for residents are allowed in the portion of Unit 26A west of 156° 00' W. longitude, excluding the Colville River drainage, where antlerless hunting through a 1 moose bag limit is allowed July 1–September 14.

There is a positive C&T for moose in Unit 26, and an ANS of 21–48, including 15–20 in Unit 26A.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The antlerless moose hunt in the portion of Unit 26A west of 156° 00' W longitude and north of the Colville River drainage would be reauthorized. Because antlerless moose seasons were closed due to population declines in the remainder of the unit, only the western portion of Unit 26A has a hunt affected by this proposal.

BACKGROUND: The moose population is low in Unit 26A and has declined since 2008. The minimum population count declined from 1,180 moose in 2008 to 610 moose in 2011. The population grew slowly from 2011–2013 but declined again to 294 moose in 2014. No count was completed in 2016. Reported moose harvest in recent years has remained low: 13 moose in 2010, 5 in 2011, 9 in 2012, 6 in 2013, 2 in 2014, 3 in 2015, 4 in 2016, and 2 in 2017.

The portion of Unit 26A west of 156° 00' W longitude and north of the Colville drainage does not have a year-round moose population. Moose occasionally disperse away from the major river drainages to the coastal plain during summer months, and these are the only moose available for harvest in this northwestern portion of Unit 26A. The small number of antlerless moose harvested under the hunt have very little impact on the size of the population. To date, after several years of hunting opportunity in this area, only 3 antlerless moose have been harvested: 1 cow in 2006, 1 in 2008, and 1 in 2014. Keeping an antlerless moose season in this portion of Unit 26A provides additional opportunity in a portion of the state that generally does not have moose.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Antlerless harvests in the western section of Unit 26A are anticipated to be very low and have little impact on the population.

COST ANALYSIS: Approval of this proposal is not expected to result in additional costs to the department.

PROPOSAL 139 – 5AAC 92.015. Brown bear tag fee exemptions. Reauthorize the brown bear tag fee exemption for Units 18, 22, 23, and 26A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? The proposal would reauthorize the current

resident tag fee exemptions for brown bears in Units 18, 22, 23 and 26A.

WHAT ARE THE CURRENT REGULATIONS? Brown bear tag fees are not required for residents in drawing, registration, or subsistence permit hunts in Units 18, 22, 23, and 26A.

Following are the customary and traditional use findings, and amounts reasonably necessary for subsistence for these units:

Game Management Unit	Finding	Amount reasonably necessary
Unit 18	Positive	20–30
Units 21 and 22	Positive	20–25
Units 23, 24, and 26	Positive	25–35

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Resident hunters would not be required to purchase a resident locking tag for drawing or registration permit brown bear hunts in Units 18, 22, 23, 26A. Similarly, hunters participating in subsistence registration permit hunts would not be required to purchase a brown bear locking tag to harvest a bear, although possession of the subsistence registration permit would still be required.

BACKGROUND: The Board of Game must reauthorize brown bear tag fee exemptions annually or the fee automatically becomes reinstated. Brown bear drawing and registration permit hunts have had fees exempted in Unit 18 for 5 years, Unit 22 for 15 years, Unit 23 for 10 years, and Unit 26A for 5 years. Exemptions have been implemented to allow: 1) incremental increases in harvest, 2) additional opportunity for residents, and 3) harvest for a wide range of uses. Increased harvest is allowable because portions of these units have high bear populations. These harvests are within sustained yield limits and previous exemptions of the resident tag fee have not caused dramatic or unexpected increases in overall harvest.

In subsistence brown bear registration permit hunts, reauthorizations are needed for Units 18, 22, 23, and 26A where requirements include: 1) a registration permit; 2) a 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 registration permit hunt area; and 6) if sealing is required, the skin of the head and the front claws must be removed and retained by the department at the time of sealing. Continuing the tag fee exemption helps facilitate participation in the associated brown bear harvest programs maintained by the department for subsistence registration permit hunts. In all units, subsistence brown bear registration permit harvest rates are low and well within sustained yield limits and exempting the resident tag fee has not caused an increase in subsistence harvest.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. Brown bear numbers are stable or increasing and the increased harvests that result from the tag fee exemption do not present a conservation concern.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

PROPOSAL 140 – 5 AAC 92.015. Brown bear tag fee exemption. Reauthorize the brown bear tag fee exemptions for the Central/Southwest Region.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal will reauthorize the brown bear tag fee exemptions in Units 9, 11, 13, 16, and 17.

WHAT ARE THE CURRENT REGULATIONS? The following regulations are currently in effect for Region IV brown bear hunts:

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 16A;
- (3) Units 16B and 17;

...

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

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

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

(D) Unit 9E, 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 9B;

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

(3) Unit 17;

...

There is a positive customary and traditional use finding for brown bears in those portions of Units 17A and 17B that drain into the Nuyakuk and Tikchik lakes, with an amount reasonably necessary for subsistence of 5. There is a positive customary and traditional use finding for brown bears in the remainder of Unit 17B, and in Unit 17C, with an amount reasonably necessary for subsistence of 10–15 bears.

There is a positive customary and traditional use finding in Unit 9B, with an amount reasonably necessary for subsistence of 10–20 bears, and a positive customary and traditional use finding in 9E, with an amount reasonably necessary for subsistence of 10–15 bears. The remainder of Unit 9 has a negative customary and traditional use finding.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Hunters will not be required to purchase a brown bear locking tag before hunting brown bears in Units 11, 13, 16, and 17. In addition, brown bear tag fees will not be required for subsistence hunts in Units 9 and 17 or for permit hunts near communities in Unit 9.

BACKGROUND: 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 opportunity to take 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 take.

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 March 2011 Board of Game meeting. Brown bears are abundant in Unit 9 and are managed as a trophy species. Brown bears are

frequently observed in communities destroying property in search of food or garbage and occasionally killing pets. The liberalized bear seasons and bag limits along with the elimination of the tag fee is 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 DLP bears.

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.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal because it provides greater sustainable harvest opportunity in Units 11, 13, 16, and 17; addresses public safety concerns in Unit 9; and provides subsistence harvest opportunity in portions of Units 9 and 17.

COST ANALYSIS: Adoption of this proposal would not result in significant costs to the department.

PROPOSAL 141 – 5AAC 92.015. Brown bear tag fee exemptions. Reauthorize the brown bear tag fee exemption for Units 12, 19, 20, 21, 24, 25, 26B, and 26C.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? The proposal would reauthorize the current resident tag fee exemptions for brown/grizzly bears in Units 12, 19, 20, 21, 24, 25, 26B, and 26C.

WHAT ARE THE CURRENT REGULATIONS? Brown/grizzly tag fees and locking tags are not required for residents in Units 12, 19, 20, 21, 24, 25, 26B, and 26C. The customary and traditional use findings and amounts reasonably necessary for subsistence are presented below:

Customary and traditional uses of brown bear populations, Region III:

Game Management Unit	Finding	Amount reasonably necessary for subsistence
Unit 12	Negative	---
Units 19A and 19B upstream of and excluding the Aniak River drainage, and Unit 19D	Positive	10–15
Units 19A and 19B downstream of and including the Aniak River drainage	Positive	5
Unit 19C	Negative	---
Unit 19D	Positive	2–6
Units 20A and 20B outside the boundaries of the Fairbanks Nonsubsistence Use Area and Unit 20C	Positive	1–3
Unit 20D, outside the boundaries of the Fairbanks Nonsubsistence Area	Positive	1–2
Unit 20E	Negative	---
Units 21 and 22	Positive	20–25
Units 23, 24, and 26	Positive	25–35
Unit 25	Negative	---

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The \$25 resident tag fee exemption would be continued for brown/grizzly bear hunts in Units 12, 19, 20, 21, 24, 25, 26B, and 26C.

BACKGROUND: The Board of Game must annually reauthorize all resident tag fee exemptions. Reauthorizing these tag fee exemptions would 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 brown/grizzly bears. Resident brown bear tag fees were put in place statewide during the mid-1970s to discourage incidental harvest, elevate the status of brown bears to trophies, and to provide revenue. Today, Region III populations are healthy, brown bears are highly regarded as trophies, and season dates and bag limits effectively regulate harvest.

Continuing all resident brown bear tag fee exemptions throughout Region III simplifies regulations, maintains high resident hunter opportunity, and is not likely to cause declines in

these brown bear populations. 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. During regulatory years 2008–2017 approximately 29% of brown bears harvested by resident hunters in Region III were taken incidentally to other activities, compared with 13% statewide.

Brown bear harvest in Interior and Northeast Alaska 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 had little effect on harvest rates in these areas.

DEPARTMENT COMMENTS: The department submitted and SUPPORTS this proposal. Brown bear numbers appear to be stable in Interior and Northeast Alaska. Resident tag fees that were in place prior to 2010 appeared to have had no effect on harvest rates in the region. Therefore, this proposal does not present a biological concern. Reauthorizing these tag fee exemptions would allow residents to opportunistically and legally harvest brown/grizzly bears without purchasing a resident brown bear tag. As part of this request to reauthorize exemption of resident brown bear tag fees 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.

COST ANALYSIS: Adoption of this proposal is not expected to result in additional costs to the department.

Draft analysis and recommendations for Proposals 146-150 are pending and will be posted on the Board of Game's website at

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-15-2019&meeting=anchorage> when available.
