

ALASKA DEPARTMENT OF FISH AND GAME
STAFF COMMENTS FOR PROPOSALS 54-58, 86, 87, 93-109, 120, 121, 126, 133, 146-148
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.

PROPOSAL 54 – 5 AAC 92.080. Unlawful methods of taking game; exceptions, and 92.085. Unlawful methods of taking big game; exceptions. Allow the use of crossbows in restricted-weapons hunts in the Southcentral Region.

PROPOSED BY: Howard Delo.

WHAT WOULD THE PROPOSAL DO? Allow crossbows to be used in special management hunts that are weapons-restricted hunts (using muzzleloader, shotgun, or bow and arrow) and while hunting in specific game management areas or state refuges that have weapons-restricted hunts (using muzzleloader, shotgun, or bow and arrow).

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.530. Management areas:

(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 Highway, and on the north by Peters Creek;
- (B) the area is closed to hunting, except that
 - (i) small game may be taken by air rifle with rifled barrel, shotgun, falconry, and bow and arrow only, north and west of the Alaska Railroad;
 - (ii) moose hunting is allowed by drawing permit, by bow and arrow only;
 - (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;

...

(26) the Kodiak Road System Youth Hunt Management Area:

- (A) Unit 8, that portion of Kodiak Island north of a line from the head of Settlers Cove to Crescent Lake (57_ 52' N. lat., 152_ 58' W. long.), and east of a line from the outlet of Crescent Lake to Mount Ellison Peak and from Mount Ellison Peak to Pokati Point at Whale Passage, and that portion of Kodiak Island east of a line from the mouth of Saltery Creek to the mouth of Elbow Creek;
- (B) the area is open to deer hunting by a child aged 10 to 17 by bow and arrow or muzzleloader only, as follows:
 - (i) the child must have successfully completed a department-approved hunter education class;
 - (ii) the child hunting with a muzzleloader must have successfully completed a department-approved muzzleloader hunter education course that includes ballistic limitations of muzzleloading weapons and a proficiency test;
 - (iii) the child hunting with a bow and arrow must have successfully completed a department-approved bowhunter education course;

Chapter 85, hunting seasons and bag limits (in areas not listed above).

- Unit 8 Remainder
 - Mountain goat (RG478/479- bow and arrow only)
- Unit 14(C)
 - Mountain goat (DG888, RG878, RG879- bow and arrow only)
 - Moose (DM444- bow and arrow only)
 - Sheep (DS140/240- bow and arrow only)
- Unit 14(C) Joint Base Elmendorf-Richardson hunts
 - Black bear (DL455- shotgun only)
 - Moose (DM421/422/423- muzzleloader only, DM423/424/426/427/428/430- bow and arrow only)
- Unit 14(C) Eagle River Management Area
 - Black bear (RL450- bow and arrow or muzzleloader only)
- Unit 14(C) Eklutna Lake Management Area
 - Black bear (general season- bow and arrow only)
 - Brown bear (DB468- bow and arrow only)
 - Moose (RM445- bow and arrow only)
 - Sheep (DS141/241- bow and arrow only)
- Unit 14(C) Anchorage Management Area
 - Moose (DM666- shotgun or muzzleloader only)
- Unit 15(A) Remainder
 - Moose (general season, bow and arrow only: Aug 22- Aug 29)
- Unit 15(A) Skilak Loop Management Area
 - Small game (falconry or bow and arrow only: Oct 1–March 1)
 - Small game youth hunt (.22 caliber rimfire or shotgun only, limited dates)
- Unit 15(B) Remainder
 - Moose (general season, bow and arrow only: Aug 22- Aug 29)
- Unit 15(C)
 - Targeted moose hunt (AM550- shotgun or bow and arrow only)

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted, crossbows would be allowed as a fourth option for special management hunts that are weapons-restricted hunts using muzzleloader, shotgun, or bow and arrow. Crossbows would also be allowed as a fourth option while hunting in specific game management areas or state refuges that have weapons restrictions to use either a muzzleloader, shotgun, or bow and arrow. The Department uses permit conditions to restrict allowable weapons in certain hunts, including at the request of Joint Base Elmendorf-Richardson (JBER) for hunts on the military base. If adopted, additional conversations will be needed with land managers to determine if crossbow use will be allowed in specific hunts.

BACKGROUND: Weapons restrictions are used in hunts for several reasons. In areas that are near human population centers, methods of take may be limited to weapons without a long-range trajectory, for public safety. In other hunts, weapons restrictions are used to limit crowding in popular hunt areas or to provide opportunity to hunt with reduced conflict between user groups.

The Department may use permit conditions to restrict allowable weapons in certain hunts, usually at the request of the land manager. If this proposal is adopted, additional conversations will need to occur between land managers and the department to determine if crossbow use will be allowed.

Weapons restricted hunts for bow and arrow only, muzzleloader only, or shotgun only hunts also require the completion of an additional education course prior to hunting, or prior to application for drawing permit hunts. Beginning in 2018, the Department implemented a crossbow education program. Hunters may not hunt with a crossbow in any hunt or area unless they have successfully completed an ADF&G-approved crossbow class.

Targeted hunts occur near populated areas (AM415 [Palmer], AM550 [Homer], and AM751 [Fairbanks]) and the method of take is limited to specific weapons that don't have long-range trajectories for public safety. In the Unit 15(C) targeted moose hunt (AM550), the method of take is limited to specific weapons (shotgun or bow and arrow only) through discretionary authority and permit conditions, as the other targeted hunts were initially.

The minimum draw weight requirements for bow and arrow are 40 or 50 pounds, depending on the species hunted. Technology has improved archery equipment and it is easier to reach the minimum draw weights required to hunt big game in Alaska.

A crossbow's effective shooting range is 30–40 yards, similar to bow and arrow, but a crossbow uses a cocking device that cocks the bow and holds it in the cocked position until the hunter pulls the trigger. Crossbows and bows deliver similar kinetic energy to the target: a crossbow's bolt travels approximately 300 feet per second (fps) with a 420-grain bolt, and generates 86.78 foot-pounds of kinetic energy, while a compound bow shooting a 350-grain arrow travels at 335 fps and generates 87.24 foot-pounds of energy.

Muzzleloader ballistics vary greatly depending on the kind and amount of powder used, in addition to bullet weight. A typical .50 caliber muzzleloader shoots a 250 grain sabot, which travels at 2,197 fps, and delivers 2,680 foot-pounds of energy at 100 yards. At 200 yards the sabot is almost 36 inches low and delivers 1,180 foot-pounds of energy. For comparison, a .308 caliber modern rifle with a 110 grain bullet has muzzle velocity of 3,165 fps and delivers 1,956 foot-pounds at 100 yards. At 200 yards it delivers 1,551 foot-pounds of energy, dropping only 1.8 inches.

DEPARTMENT COMMENTS: The department is **NEUTRAL** regarding the use of crossbows as a legal method of take in weapon-restricted hunts. This proposal is allocative in nature and does not address biological concerns.

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

PROPOSAL 55 – 5 AAC 92.085. Unlawful methods of taking big game; exceptions.

Remove the restriction on the use of aircraft for spotting Dall sheep in Units 7 and 14.

PROPOSED BY: Robert Stone.

WHAT WOULD THE PROPOSAL DO? This proposal would remove the restriction on the use of aircraft for spotting Dall’s sheep in Units 7 and 14 by rescinding the regulations created by passing Proposal 207 in March 2015.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.085. Unlawful methods of taking big game; exceptions

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field. Restrictions in this paragraph do not apply to

(A) taking deer;

(B) repealed 7/1/92;

(C) a person flying on a regularly scheduled commercial airline, including a commuter airline;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Hunters would be able to use aircraft to locate and evaluate Dall’s sheep rams during the sheep hunting season in Units 7 and 14. This proposal is only applicable to Units 7 and 14C, even though the proponent did not specify Unit 14C.

BACKGROUND: During the 2015 board cycle, the board adopted a proposal to restrict aircraft use. The regulation allows for hunters to use an aircraft to establish and maintain sheep hunting camps, but prohibits the use of aircraft to spot or locate sheep during the hunting season. The board received seven proposals that addressed this regulation at the 2016 Statewide Board of Game meeting and addressed two other proposals at the November 2017 Statewide Board of

Game meeting. This proposal seeks to rescind the current regulation restricting the use of aircraft for hunting sheep in Units 7 and 14.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on allowing this type of aircraft use during sheep hunts because it does not create or address a biological concern.

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

PROPOSAL 56 – 5 AAC 92.106. Intensive management of identified big game prey populations. Prohibit nonresident hunting of moose and caribou under intensive management in the Southcentral Region until harvest or population objectives are met.

PROPOSED BY: Resident Hunters of Alaska.

WHAT WOULD THE PROPOSAL DO? The proposal would eliminate nonresident hunting seasons for the target prey species, specifically moose and caribou, in any area that has a current Intensive Management (IM) Plan in regulation until the minimum IM objectives for the target prey species population size or harvest are being met.

WHAT ARE THE CURRENT REGULATIONS? Nonresident moose hunting seasons are listed in 5AAC 85.045 and nonresident caribou hunting seasons are listed in 5AAC 85.025. The regulations are also summarized in the current Alaska Hunting Regulations.

IM programs have been established to restore moose and caribou, and deer populations throughout Alaska. A list of current IM programs and their status is maintained on the department’s website at

<http://www.adfg.alaska.gov/index.cfm?adfg=intensivemanagement.programs>.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Nonresidents would not be authorized to hunt moose or caribou, respectively, in IM areas unless the minimum population or harvest objectives for the target prey species (moose or caribou) are met. The new restriction would apply to all of the predator control programs listed in codified regulation (5AAC 92.110 through 5AAC 92.125) that have not expired and any new IM programs that are adopted after the proposed regulation takes effect, and it would only apply to the prey species for which the program was developed.

BACKGROUND: IM programs are developed to meet IM objectives for caribou, moose, and deer populations that have been identified as important for high levels of consumptive use. During the program development process, the department develops draft Feasibility Assessments and Operational Plans that are reviewed by the board. Codified regulations are adopted for programs that are feasible and have a reasonable chance of success.

It is important to note that while many populations of moose, caribou, and deer have a positive IM finding listed in 5AAC 92.108, the majority of these populations do not have a formal IM program. There are 17 established IM plans in regulation, some of which are expired. Most of

the plans are not active. There are two areas in the Southcentral Region with intensive management plans in regulation: Unit 15A (expired plan) and Unit 15C (inactive plan).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to allocate harvest to residents when the population is below IM objectives and a formal IM program has been developed. No biological concerns are identified or addressed by this proposal. The department recommends that the biological and social implications and the potential effect on management strategies for each area be considered on a case-by-case basis.

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

Proposal 57 - 5 AAC 92.540(11)(B). Controlled use areas. Modify the Controlled Use Area in Unit 6B as follows:

Change the dates from August 15 – September 4 to August 25 – September 4 and strike the words “hunters or their gear.”

PROPOSED BY: Robert Mattson Jr.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to shorten the dates that restrict using motorized vehicles for transporting moose hunters or their gear by ten days, changing the dates from August 15-September 4 to August 25-September 4. It also seeks to remove the wording “hunters or their gear”. If this regulation change occurred, specifics would need to be determined as to when—before and after hunting—motorized vehicles could be used.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.540. Controlled use areas:

11) Unit 6 (B) Controlled Use Area:

(A) the area consists of all of Unit 6(B);

(B) the area is closed to the use of any motorized vehicle for moose hunting or transporting hunters or their gear from August 15-September 4, with the exception of vehicles on the maintained surface of the Copper River Highway, Carbon Mountain Road, the Clear Creek boat launch, and vessels crossing (Ferry/Transfer vessels) at mile 36 bridge (wash-out) which can be conducted in a substantially straight line and no more than ¼ mile above or below the bridge. Moose may not be taken until after 3:00 a.m. on the day following the day which any motorized vehicle is used for transportation, from September 5 through October 31

...

The board has made a negative customary and traditional use finding for moose in Unit 6.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Hunters could use motorized vehicles to access the hunt area ten days closer to the start of the season.

Hunters could set up early camps with motorized vehicles, but not hunt using motorized vehicles. The proposal as written could remove or modify the currently existing non-motorized portion of the hunt (September 1-5).

BACKGROUND: The moose season in Unit 6B runs from September 1-October 31 by registration permit only. Many hunters participating in moose hunts in Unit 6 are very efficient, using air boats and jet boats to support their hunt, and harvest quotas can be taken very quickly. Some hunters desired a non-motorized experience early in the season where a hunter “walks in” from the highway or uses a canoe. Since 1993 there has been a 4-day “walk in” hunt at the beginning of the season where motorized vehicles can only be used on the Copper River Highway, Carbon Mountain Road, and the Clear Creek boat launch. Originally managed through hunt conditions, the Board codified the motorized use restriction in 2004. At the same time, the Board codified the current regulations prohibiting same-day motorized hunting for moose. Beginning September 5, moose hunters may use motorized transport (other than highway vehicles) but may not hunt until after 3:00 am the day following use. In 2015, the board adjusted the specifications for motorized use to address changes in access resulting from a failed section of the Copper River Highway that is not anticipated to be repaired. At this time the board also set in regulation the dates in advance of the season (August 15-September 4) that motorized vehicles cannot be used to support moose hunters. These dates were previously only specified in permit hunt 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 58 – 5 AAC 085.045(a)(4) Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose seasons in Unit 6(C).

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? Adoption of this proposal would ensure that the department has the necessary tools to manage the Unit 6(C) moose population within objectives.

WHAT ARE THE CURRENT REGULATIONS?

Seasons and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(4)		
...		
Unit 6(C)	Sept. 1–Oct. 31	No open season

(General hunt only)

1 moose by drawing permit only; up to 40 permits for bulls and up to 20 permits for antlerless moose may be issued

1 moose by registration permit only

Nov. 1–Dec. 31

No open season

...

The board made a negative customary and traditional use finding for all of Unit 6.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal reauthorizes antlerless hunts in Unit 6(C) as required by statute. Resident hunters would be able to continue to harvest antlerless moose during hunts administered by ADF&G on state-managed lands in Unit 6.

BACKGROUND:

Antlerless moose seasons must be reauthorized annually. The population objective is 600–800 moose. Population objectives were increased in 2017 in consultation with the local advisory committee and are documented in the most recent moose Management and Operational Plan: http://www.adfg.alaska.gov/static/research/wildlife/speciesmanagementreports/pdfs/moose_2015_2020_smr_gmu_6.pdf.

A population survey completed during March 2018 yielded an estimate of 677 moose, 32% of which were calves. This population is aggressively harvested to maintain it within population objectives. We have managed this hunt cooperatively with the U. S. Forest Service and the available antlerless harvest quota in Unit 6C is currently harvested under a federal subsistence season. We have not held the state antlerless hunt since the 1999–2000 season. In 2013, a registration hunt was established that could be used to harvest moose, including antlerless moose, if the federal subsistence hunt is not held or it does not result in the desired amount of harvest. At this time, quotas have been raised on both the federal and state side to increase harvest and to bring the population within its objectives. A state hunt for antlered bull moose (DM167) is held each year, in addition to the federal subsistence hunts. Continuation of the antlerless hunts is a necessary tool to achieve population objectives.

DEPARTMENT COMMENTS:

The department **SUPPORTS** this proposal to reauthorize antlerless harvests in Unit 6.

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

PROPOSAL 86 – 5 AAC 85.065. Hunting seasons and bag limits for small game.

PROPOSED BY: Homer Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? Reduces the bag limit for spruce grouse in Units 7 & 15 to 5 per day 10 in possession.

WHAT ARE THE CURRENT REGULATIONS?

(1)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Units and Bag Limits		
Units 7 & 15	Aug. 10 – Mar. 31	Aug. 10 – Mar. 31
10 per day, 20 in possession, of which not more than 1 per day and 2 in possession may be ruffed grouse		

There is a positive customary and traditional use finding for grouse in that portion of Unit 15C outside the Anchorage-Matsu-Kenai Peninsula nonsubsistence area; however no amount reasonably necessary for subsistence uses has been established.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal reduces the bag limit for spruce grouse in Units 7 & 15 to 5 per day 10 in possession, which may impact subsistence hunting opportunity in a portion of GMU 15C.

BACKGROUND: What is known about spruce grouse population status on the Kenai Peninsula is currently limited to information collected through the statewide wing collection program and field observations recorded by DWC staff and the public (Table 86-1). Based on the statewide wing collection program, 94% of spruce grouse hunter effort on the Kenai Peninsula occurs before 31 October. Therefore, reducing the season duration (closes 31 March) would likely have little effect on harvest unless a drastic reduction (closure prior to 1 October) was instituted.

Based on DWC staff reports and hunter observations, spruce grouse populations on the Kenai Peninsula appear to be below the long-term average, although they do show signs of increasing. This follows a 2 to 3 year trend of lower than average chick production as noted from hunter

harvested wing collections, which are a direct reflection of the overall chick production from the previous summer.

Table 86-1. Total number and proportion of juvenile spruce grouse with binomial 95% confidence intervals based on harvested wing collections within the Kenai Peninsula region, Alaska, regulatory years^a 2011–2017.

Regulatory year ^a	Unit	Adult	Juvenile	Unk	Total	Proportion of juveniles	95% CI ^b
2011	7, 15	27	54	0	81	0.67	0.55–0.77
2012	7, 15	59	33	0	92	0.36	0.26–0.47
2013	7, 15	73	49	0	122	0.4	0.31–0.49
2014	7, 15	49	54	0	103	0.52	0.42–0.62
2015	7, 15	46	69	0	115	0.6	0.50–0.69
2016	7, 15	22	67	1	90	0.74	0.64–0.83
2017	7, 15	50	65	0	115	0.57	0.47–0.66

^a Regulatory year begins 1 July and ends 30 June (e.g., regulatory year 2016 = 1 July 2016–30 June 2017).

^b CI = confidence interval.

Due to cool, wet weather immediately post-hatch (June), it is highly likely the Kenai Peninsula spruce grouse population suffered low chick survival. The effects of this weather pattern on chick survival is a phenomenon that has been well documented among other Alaskan grouse and ptarmigan populations through brood surveys and hunter harvested wing collections.

Based on hunter effort timing, a bag limit reduction is the most effective way to address any spruce grouse population concerns.

Household surveys conducted in the three communities in the portion of GMU 15C outside the nonsubsistence area estimated an annual harvest of grouse from 69 (in 2000) to 164 (in 1993), and a long-term average combined harvest of 138 grouse (Table 86-2).

Table 86-2. Estimated grouse harvests by residents of Port Graham, Nanwalek, and Seldovia, 1982, 1987, 1989–1993, 1997, 2000, 2003, and 2014.

Year	Estimated grouse harvest			All three communities
	Port Graham	Nanwalek	Seldovia	
1982	-	-	39	n/a
1987	14	42	-	n/a
1989	18	24	-	n/a
1990	30	42	-	n/a
1991	39	20	95	154
1992	12	8	137	157
1993	18	9	137	164
1997	17	39	-	n/a
2000	50	19	0	69
2003	65	67	-	n/a
2014	53	14	61	128
<i>Average</i>	32	28	78	138

Source Alaska Department of Fish and Game Division of Subsistence, Community Subsistence Information System, 2018.

Note A dash (-) represents no survey information for that year.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. If adopted, the board should consider if there is still a reasonable opportunity for a normally diligent participant to have success in harvesting grouse for subsistence uses.

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

PROPOSAL 87 – 5 AAC 85.065(a)(3. Hunting Seasons and bag limits for small game.

PROPOSED BY: Mildred Martin

WHAT WOULD THE PROPOSAL DO? Closes the ptarmigan season in Unit 15C for a minimum of 5 years.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 15C north of Kachemak Bay and north of	Aug. 10–Jan. 31	Aug. 10–Jan. 31

the north bank of Fox River

5 per day, 10 in possession

Units 6(D), 7, 11, 13(A), 13(C),
13(D), 13(E), and 14, remain-
Der of 15, and 16

Aug. 10 –Mar. 31

Aug. 10 – Mar. 31

10 per day, 20 in possession

There is a positive customary and traditional use finding for ptarmigan in that portion of Unit 15C outside the Anchorage-Matsu-Kenai Peninsula nonsubsistence area; however no amount reasonably necessary for subsistence uses has been established.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

The ptarmigan season in unit 15C would be closed, which would impact subsistence hunting opportunity in a portion of GMU 15C.

BACKGROUND: Historically, portions of Unit 15C have had abundant populations of ptarmigan, particularly willow ptarmigan. Beginning in the late 1990s and continuing through 2015 populations north of Kachemak Bay appeared to decline substantially. During the March 2015 meeting, the Board reduced the ptarmigan season by 2 months and reduced the daily bag limit from 10 per day to 5 per day north of Kachemak Bay and the Fox River. The current season closure date of 31 January likely has limited the predominant means of ptarmigan hunter access in the unit (snowmachine) and as a result has reduced pre-2015 harvest levels.

Beginning in spring 2015, spring breeding survey data from Unit 15C has documented an increase in abundance throughout the unit (Table 87-1). No conservation concern exists for ptarmigan south of Kachemak Bay and along the Fox River drainage.

Table 87-1. Willow ptarmigan spring breeding abundance on the Kenai Peninsula compared to other Southcentral units.

Year	Mean males / survey stop				
	15C	Kenai Pen.	13B	13E	14C
2015	0.21	0.30	1.04	0.57	0.88
2016	0.38	0.29	1.76	0.95	1.21
2017	0.38	0.90	1.13	0.74	2.13
2018	1.40	0.78	2.31	0.60	2.33

Household surveys conducted in the three communities in the portion of GMU 15C outside the nonsubsistence area estimated an annual harvest of ptarmigan from 6 (in 2000) to 214 (in 1993), and a long-term average combined harvest of 130 ptarmigan (Table 87-2).

Table 87-2. Estimated ptarmigan harvests by residents of Port Graham, Nanwalek, and Seldovia, 1982, 1987, 1989–1993, 1997, 2000, 2003, and 2014.

Year	Estimated ptarmigan harvest			All three communities
	Port Graham	Nanwalek	Seldovia	
1982	-	-	369	n/a
1987	0	0	-	n/a
1989	0	25	-	n/a
1990	0	2	-	n/a
1991	0	1	7	8
1992	0	0	110	110
1993	0	0	214	214
1997	0	0	-	n/a
2000	6	0	0	6
2003	-	0	-	n/a
2014	-	0	61	61
<u>Average</u>	1	3	127	130

Source Alaska Department of Fish and Game Division of Subsistence, Community Subsistence Information System, 2018.

Note A dash (-) represents no survey information for that year.

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

If adopted outside of the nonsubsistence area, the board should consider if there is still a reasonable opportunity for a normally diligent participant to have success in harvesting ptarmigan for subsistence uses.

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

PROPOSAL 93 – 5 AAC 85.030. Hunting seasons and bag limits for deer. Increase the bag limit for deer in the Remainder of Unit 8 from three deer to five deer. All other regulations would stay the same as they are now except language would be added to provide the Department authority to adjust bag limits as needed by emergency order.

PROPOSED BY: Andrew Finke.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to raise the bag limit for deer on Kodiak Island (Remainder area) to five total deer.

WHAT ARE THE CURRENT REGULATIONS?

**Resident
Open Season**

Units and Bag Limits	(Subsistence and General Hunts)	Nonresident Open Season
...		
(6)		
Unit 8, that portion of Kodiak Island north of a line from the head of Settlers Cove to Crescent Lake (57° 52' N. lat., 152° 58' W. long.), and east of a line from the outlet of Crescent Lake to Mount Ellison Peak and from Mount Ellison Peak to Pokati Point at Whale Passage, and that portion of Kodiak Island east of a line from the mouth of Saltery Creek to the mouth of Elbow Creek, and adjacent small islands in Chiniak Bay		
1 buck; or	Aug. 1–Oct. 31	Aug. 1–Oct. 31
1 deer, by bow and arrow or muzzleloader only	Nov. 1–Nov. 14 Nov. 16–Dec. 31	Nov. 1–Nov. 14 Nov. 16–Dec. 31
Remainder of Unit 8	Aug. 1–Dec. 31	Aug. 1–Dec. 31
3 deer; however, only bucks may be taken before Oct. 1		

There is a positive customary and traditional use finding for deer in Unit 8, and an amount reasonably necessary for subsistence of 3,600–4,100 deer.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would raise the bag limit from three deer to five deer in the Remainder of Unit 8 (non-road system) and could increase deer harvest in that area. An increased bag limit will likely have minimal impact on the overall population; however, an increased bag limit may result in high harvest in easily accessible areas of the island which may be unsustainable.

BACKGROUND:

Deer are an important subsistence, economic, and recreational resource throughout the Kodiak Archipelago. Venison has surpassed marine mammals as a primary source of mammalian protein for community residents, and income generated from services provided from resident and non-resident deer hunters is a major factor in the local economy.

Although hunting is an important consideration, deer mortality in Unit 8 is primarily driven by winter severity. Unlike areas where they originated (southeast Alaska); much of the archipelago lacks dense coniferous forests which provide thermal cover, reduced snow depth, and vegetative forage during harsh winters. As a result, the deer population on the Kodiak archipelago is primarily affected by weather patterns and fluctuations in winter severity.

Annual winter mortality is assessed by searching for and examining deer carcasses in known coastal wintering areas. Winter conditions and physical appearance of deer are evaluated using aerial surveys. Local hunters and guides provide anecdotal information on deer mortality, body condition, and general appearance throughout the season. The Unit 8 deer population experienced substantial winter mortality during the harsh winter of 2015-2016, with an estimated 25-30% loss of the deer herd. Recent surveys and reports from hunters and guides indicate the deer population throughout the archipelago has recovered well, particularly in the southern and eastern portions of Kodiak Island and throughout Afognak Island. Recovery of the deer population in the western and interior portions of the island and along the road system was slower but appears to be nearly recovered. Deer mortality surveys conducted in spring 2017 and spring 2018 suggest winter mortality was minimal.

Over the last 10 years (RY08-RY17), an average of 3,500 hunters have entered the field annually with an average success rate of 69%. Successful hunters harvested approximately 1.2 deer/year, with an average annual harvest of 4,500 deer, of which 80% are male. Between RY08 and RY17, on average 44% of hunters harvested one deer, 26% of hunters harvested two deer, and 29% of hunters harvested three deer. Most deer harvest occurs during the months of October, November, and December with 10-year averages totaling 24.2%, 44.0%, and 18.4% of the annual harvest, respectively.

Nonresidents comprise about 16% of deer hunters annually (average ~500) of which approximately 63% of those who hunt are successful, resulting in an average non-resident harvest of 300-400 deer/year. However, the total number of nonresident hunters appears to fluctuate with weather (i.e., winter severity) and deer population forecasts. Nonresident hunter participation decreases significantly following harsh winters when deer hunting forecasts are bleak. Residents comprise 84% of deer hunters of which ~70% of those who hunt are successful. Although harvest of deer is an important consideration, hunter harvest is presumed to have minimal impact on the overall population size. An increased bag limit is likely to have minimal impact on the overall population but may result in temporary population “sinks” in highly accessible areas of the island and may slow population recovery times following harsh winters.

The current federal subsistence season for Unit 8 deer has a bag limit of three deer and season dates of August 1- January 31.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to increase the resident and non-resident bag limit for deer in the Remainder of Unit 8 to five deer.

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

PROPOSAL 94 – 5 AAC 85.040. Hunting seasons and bag limits for goat. Lengthen the hunting season for goat in Unit 8 Remainder.

PROPOSED BY: Kodiak Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal seeks to lengthen the hunting season for goat in Unit 8 Registration hunt areas RG471–RG479. This proposal would extend the closure date from December 15 to January 31 for these registration hunts.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Remainder of Unit 8		
1 goat by drawing permit only; up to 500 permits may be issued; the taking of nannies with kids is prohibited; or	Aug. 20–Oct. 25 (General hunt only)	Aug. 20–Oct. 25
1 goat by registration permit only; the taking of nannies with kids is prohibited	Nov. 1–Dec. 15 (General hunt only)	No open season.

...

The board has made a negative customary and traditional use finding for goats in Unit 8.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would lengthen the goat hunting season for residents in Unit 8 Remainder, specifically registration goat hunts RG471–RG479. The season would be extended from the current closure date of December 15 to January 31. Because goat registration hunts are typically closed by Emergency Order when harvest objectives are approximated, and since some target harvest objectives are not always met, this proposal would allow additional harvest opportunities in areas where harvest objectives have not been achieved.

BACKGROUND:

Due to a robust population and liberal hunting regulations Kodiak Island is currently one of the most popular goat hunting destinations in Alaska, accounting for a significant portion of the statewide goat harvest. Kodiak goats have experienced irruptive population growth starting shortly after their arrival to the island in the early 1950s with population estimates nearing 3,500 in 2017. As goats continue to flourish, management objectives have shifted from promoting range expansion and increased densities, to slowing or stabilizing population growth at a level that will provide sustained hunting opportunities while maintaining good habitat quality.

Currently, there are eight goat hunt areas managed using a drawing and registration permit system. One area (RG480) is managed exclusively as a registration hunt and is open to Alaska residents and non-residents hunting with a guide or second degree of kindred. The other seven areas (DG/RG471–DG/RG479) are comprised of a drawing hunt (open to residents and guided non-residents) followed by a registration hunt (if needed) that is open to Alaska residents only. Goat harvest quotas are established annually for each of these hunt areas based on goat abundance and distribution estimates and typically range between 5%–20% of the estimated population. If harvest quotas are not met during the drawing permit season, registration permits are made available. Registration permits for some hunts must be picked up in the village closest to the hunt area (e.g., RG471-RG474 in Port Lions, RG476 in Old Harbor) and access to these areas may be restricted. For example, hunt areas RG471-RG474 and RG476 cannot be accessed by aircraft except when using state-maintained airports or salt water. Registration goat hunt areas RG478-RG479 are weapons restricted hunts (archery only) and are contained primarily within the Kodiak road system.

Historically, some areas of the registration hunt have failed to open because harvest quotas have been met during the drawing hunt. Based on harvest, some hunts have not opened in 6 of the last 10 years with the number of areas closed fluctuating between 2 and 4. For areas that have opened for a registration hunt, there have been no emergency orders closing a hunt after it has opened indicating these additional hunt opportunities have not substantially increased harvest.

Most goat harvest occurs during September and October with 23% and 43% of the total harvest (drawing and registration) occurring during these months, respectively over the last 10 years. On average, 15%, 4%, and 1% of the total harvest occurs in November, December, and January, respectively with a 10-year average of 36 goats harvested in November, 9 goats in December, and 4 goats in January. The extension of the goat hunting season in the Remainder hunt area will increase hunter opportunity while improving our ability to reach established harvest objectives.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to extend the hunting season for goats in the Remainder of Unit 8 hunt areas.

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

PROPOSAL 95 – 5 AAC 85.040. Hunting seasons and bag limits for goat. Change the bag limit, lengthen the season, and implement reporting requirements for goat in Unit 8 RG480 registration hunt area.

PROPOSED BY: Kodiak Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to change the bag limit, lengthen the season, and implement reporting requirements for goats in the Unit 8 RG480 registration hunt area. This proposal would change the harvest requirements from 2 goats of either sex (per hunter) to 2 goats, of which only one may be a billy. This proposal also seeks to extend the closure date in RG480 from March 20 to March 31 and implement additional reporting requirements by requiring hunters to either bring the goat head/horns to the Alaska Department of Fish and Game within 5 days of completion of the hunt or submit a photo of the head/horns to Alaska Department of Fish and Game within 30 days of the completion of the hunt.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 8, the portion of Kodiak Island south and west of a line extending along the Spiridon River, following the North Fork of the Spiridon to its headwaters, then going southwest following the spine of the island over Koniag, peak to the headwaters of the South Fork of Midway Creek, then down-Stream on Midway Creek to Midway Bay	Aug. 20–Mar. 20 (General hunt only)	Aug. 20–Mar. 20
2 goats by registration permit only; the taking of nannies with kids is prohibited; or		
...		

The board has made a negative customary and traditional use finding for goats in Unit 8.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If this proposal were adopted the closure date for goat hunting in registration hunt area RG480 would be extended from March 20 to March 31. In addition, the bag limit in RG480 would change from 2 goats of either sex to 2 goats, only one of which may be a billy.

This proposal intends to extend the season and increase nanny harvest while striving to improve perceived trophy quality of billies. Because goat hunting on Kodiak is popular in March when most other big game hunting seasons are closed, extending the season by 11 days could presumably increase harvest in RG480. In addition, attempting to increase nanny harvest by requiring 1 goat in the 2-goat bag limit be a nanny may also contribute to reducing or stabilizing population growth. However, because few hunters successfully harvest 2 goats, the impact of this modification would likely be minimal. If passed, this proposal would initiate the first gender specific goat hunt in Alaska.

If adopted, this proposal would also require hunters to either submit the goat head/horns to the Alaska Department of Fish and Game for aging and data collection within 5 days of completion of the hunt or submit a photo of the head/horns to Alaska Department of Fish and Game within 30 days of the completion of the hunt. This proposal is attempting to provide Department staff with age and gender information on harvested goats by using photographs of horns and horn annuli. This would provide a mechanism to increase accuracy of harvest data without implementing a mandatory sealing requirement. This method is not currently used anywhere else for managing goats in Alaska.

BACKGROUND:

Registration goat hunt RG480 encompasses the southwestern half of Kodiak Island and includes an estimated 2,000 mountain goats. The goat population has increased rapidly since introduction, expanding throughout much of the island. Hunting regulations have been liberalized in recent years to encourage hunter participation and slow population growth. Hunting in RG480 is currently open from August 20–March 20 by registration permit and, beginning in 2013, has a bag limit of 2 goats of either sex. Permits are available on-line and at selected department offices. Resident and nonresident hunters may participate, but nonresidents must be accompanied by an Alaska-licensed guide or a resident relative within second degree of kindred. Over the last 5 years (RY13-RY17), on average 1,366 permits were issued annually for RG480 with an average harvest of 221 goats. The 5 years prior (RY08-RY12), on average 329 permits were issued annually with an average harvest of 59 goats. Since inception of the 2-goat bag limit in 2013, on average 32 hunters a year (range 21-42) have harvested 2 goats. Liberalized harvests have resulted in a relatively stable goat population in the eastern portion of the hunt area, but goat numbers continue to increase slightly in the western portion.

The first part of this proposal suggests extending the season length by 11 days to end March 31. The current season runs from August 20 – March 20. During much of the latter part of the hunting season day length and weather make access difficult; extending the season may increase hunter opportunity and harvest in some areas of the hunt area. In addition, this is also a time when goats in many areas occupy lower elevations due to high snow levels and lack of access to food resources at higher elevations, potentially further increasing harvest opportunities. Brown bear hunting season commences on April 1, although most hunting does not begin until April 15. Temporal separation of goat and bear seasons is intended to minimize the opportunity to harvest bears that might be attracted to wounded or recently harvested goat carcasses. Over the last 5 years (RY13-RY17), most goat harvest in RG480 occurred during October and November with 39% and 19% of the total harvest occurring during these months. On average, 11% of the total harvest in RG480 occurred in March with a 5-year average of 23 goats harvested in March.

The second part of the proposal seeks to modify the goat bag limit in RG480 from 2 goats of either sex to 2 goats only one of which may be a billy. The intent of this part of the proposal is to slow or stabilize goat population growth by increasing the number of females harvested while simultaneously increasing the perceived trophy quality of billies. Over the last 5 years (RY13-RY17), on average 135 male goats and 86 female goats were harvested annually in RG480. The estimated adult:kid ratio from annual composition counts was 30 kids per 100 adults over the last 5 years and ranged from 26–39 kids per 100 adults. Increasing nanny harvest in RG480 may reduce or stabilize population growth; however, because few hunters successfully harvest 2 goats, the impact of this proposal would likely be minimal. One concern is that single sex hunts can be difficult for hunters because many hunters, particularly inexperienced hunters, have difficulty identifying goat gender from a distance. If passed, this proposal would initiate the first gender specific goat hunt in Alaska.

The third part of the proposal implements reporting requirements for goats in RG480. Specifically, hunters would be required to submit a photo of the head and horns of all goats harvested in RG480 for aging and gender identification purposes. Despite continued population growth, high harvest, and increasing interest in goat hunting on Kodiak there is limited information collected from goats harvested in RG480, and elsewhere on the island. Currently, the only age and gender information collected on goats is collected through mandatory harvest reporting. Providing a mechanism to increase accuracy of harvest data is desirable; however, there is some concern regarding consistency, reliability, and enforcement of photo reporting.

The cumulative impacts of this proposal are unknown. This proposal may be effective in reducing goat numbers to a more desirable level and may also provide more robust information regarding harvest demographics.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to change the bag limit, lengthen the season, and implement reporting requirements for goats in the Unit 8 RG480 registration hunt area.

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

PROPOSAL 96 – 5 AAC 85.040. Hunting seasons and bag limits for goat. Establish a new registration hunt for goats in Unit 8.

PROPOSED BY: Michael Bradshaw.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to establish a new registration hunt area, a unique hunt season, and a separate bag limit for goats on a portion of the Unit 8 RG480 registration hunt area on the Aliulik Peninsula. If adopted, this proposal would create a new registration hunt area for goats on the Aliulik Peninsula, comprised specifically of Kodiak (bear) Hunt Area 07. The new hunt area would have reduced season dates from October 1–December 1 and would reduce the bag limit from 2 goats as currently allowed in RG480 to 1 goat. The hunt area would continue to be open to both residents and nonresidents.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 8, the portion of Kodiak Island south and west of a line extending along the Spiridon River, following the North Fork of the Spiridon to its headwaters, then going southwest following the spine of the island over Koniag, peak to the headwaters of the South Fork of Midway Creek, then downstream on Midway Creek to Midway Bay	Aug. 20–Mar. 20 (General hunt only)	Aug. 20–Mar. 20
2 goats by registration permit only; the taking of nannies		

with kids is prohibited; or

...

The board has made a negative customary and traditional use finding for goats in Unit 8.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal is attempting to reduce the number of goats harvested on the Aliulik Peninsula, specifically the private lands owned by Akhiok-Kaguyak Native Corporation, while simultaneously increasing the billy to nanny ratio in the area. If adopted, this proposal would increase the complexity of the Kodiak goat hunting regulations by creating a separate season and a separate bag limit for this area. Limiting harvest to 1 goat per hunter is likely to have little effect on overall harvest because very few hunters harvest 2 goats in this area. Implementing a 1 goat bag limit while reducing the hunting season from 7 months (Aug 20–Mar 20) to 2 months (Oct 1–Dec 1) would presumably reduce harvest in the area, but may compromise ADF&G’s management objective to reduce or stabilize population growth in hunt area RG480. This proposal does not address the primary concern of unauthorized harvest of goats on private lands.

BACKGROUND:

Hunt area RG480 encompasses the southwestern half of Kodiak Island and is comprised primarily of public lands with smaller inholdings of private lands. The Akhiok-Kaguyak Native Corporation owns sections of land in RG480 on the southern tip of Kodiak Island, specifically areas contained within Kodiak (bear) Hunt Area 07 on the Aliulik Peninsula. The southern portion of Aliulik Peninsula has very little suitable goat habitat and is comprised primarily of flat bench lands with tundra vegetation, lakes, shallow ponds, and intermittent alder and willow patches. The northern portion of the peninsula includes more suitable goat habitat with more rugged topography that includes rolling hills, wide valleys, and mountains with moderate to steep relief. Mountain goats were initially identified on the Aliulik Peninsula in the early 2000s and primarily occur in the Japanese Bay area of the peninsula with smaller groups occasionally observed near Cape Kiavak and the head of Kaguyak Bay. Recent goat surveys identified 23 goats (21 adults, 2 kids) in 2015, 74 goats (50 adults, 24 kids) in 2016, 76 goats (59 adults, 17 kids) in 2017, and 45 goats (35 adults, 10 kids) in 2018. However, it is important to note these numbers reflect actual goats counted and do not account for undetected goats because no sightability correction factor was applied.

From RY13-RY17, on average there were 116 goat hunters (range 102-139) on the Aliulik Peninsula (Table 96-1) of which 55 were successful (range 48-70). Average annual harvest consisted of 35 males and 20 females with most goats harvested in Oct (39.5%), Nov (27.5%), and March (11.6%).

Table 96.1 – Goat harvest on Aliulik Peninsula, 2013–2017.

Goat Harvest on Aliulik Peninsula

	Total			Successful			Harvest		
	Total Hunters	Total Days Hunted	Avg. Days Hunted	# Successful Hunters	Total Days Hunted	Avg. Days Hunted	Males	Females	Total
2017	139	666	4.8	70	262	3.7	50	20	70
2016	115	548	4.8	55	230	4.2	28	27	55
2015	110	668	6.1	48	278	5.8	32	16	48
2014	115	542	4.7	51	228	4.5	32	19	51
2013	102	444	4.4	52	223	4.3	32	20	52
5-year Avg.	116.2	573.6	4.96	55.2	244.2	4.5	34.8	20.4	55.2

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to establish a new registration hunt area, a unique hunt season, and a separate bag limit for goats in the Aliulik Peninsula portion of the Unit 8 RG480 registration hunt area.

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

PROPOSAL 97 – 5 AAC 84.040. Hunting seasons and bag limits for goat. Allow the use of muzzleloaders for goat hunting in Unit 8.

PROPOSED BY: Benjamin Shryock

WHAT WOULD THE PROPOSAL DO? This proposal provides two options, both of which would allow the use of muzzleloaders for goat hunting in restricted weapons registration hunts RG478 and RG479 on the Kodiak Road System.

Option 1 would add muzzleloaders to the restricted weapons (archery only) hunts in goat hunt areas RG478 (South Road System) and RG479 (North Road System).

Option 2 would add muzzleloaders to the restricted weapons (archery only) hunts in goat hunt areas RG478 (South Road System) and RG479 (North Road System) beginning November 23, resulting in a 3-week (Nov. 1–Nov. 22) archery only registration hunt followed by a 3-week (Nov. 23–Dec. 15) archery and muzzleloader only registration hunt.

WHAT ARE THE CURRENT REGULATIONS?

Resident	
Open Season	
(Subsistence and	Nonresident

Units and Bag Limits	General Hunts)	Open Season
...		
Remainder of Unit 8		
1 goat by drawing permit only; up to 500 permits may be issued; the taking of nannies with kids is prohibited; or	Aug. 20–Oct. 25 (General hunt only)	Aug. 20–Oct. 25
1 goat by registration permit only; the taking of nannies with kids is prohibited	Nov. 1–Dec. 15 (General hunt only)	No Open Season.

...

The board has made a negative customary and traditional use finding for goats in Unit 8.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Due to their range and effectiveness, the addition of muzzleloaders to the restricted weapons hunt may result in harvest objectives being met sooner and may facilitate reaching harvest quotas during years where they otherwise would not be met. This proposal would have little impact on the overall goat harvest in the area because it will not affect established harvest quotas and the affected registration hunts (RG478 and RG479) will be closed by Emergency Order when the target harvest objectives are met.

BACKGROUND:

Kodiak goats have undergone remarkable population growth since being introduced to Kodiak Island in the early 1950s, with recent population estimates approaching 3,500. As goats continue to thrive, management objectives have shifted from promoting expansion and growth to slowing or stabilizing population growth. On the Kodiak road system, there are 2 goat hunting areas (DG/RG478 and DG/RG479) managed using a drawing and registration permit hunt structure. Both areas are comprised of a drawing hunt followed by a registration hunt (when needed). Registration goat hunts in these areas are currently restricted to archery only and are only open to Alaska residents. If harvest quotas are not met during the drawing hunt, an archery-only registration hunt will open and permits will become available at the Kodiak ADF&G office or online. Although some registration hunts have not opened because quotas were met during the drawing hunt, there have been no emergency orders issued closing a registration hunt in RG478 or RG479 after they have opened.

Goat harvest quotas are established annually for each hunt area based on goat distribution and abundance estimates. Harvest quotas for hunt areas DG/RG478 and DG/RG479 typically range between 15%–20% of the estimated population, with quotas for the last 5 years ranging from 35-74 for area DG/RG478 and 16-30 for area DG/RG479. At the end of the RY16 and RY17 goat

hunting seasons there were 37 and 33 goats remaining in DG/RG478, and 8 and 13 goats remaining in the harvest quota for DG/RG479.

Over the last 5 years, excluding RY15 in which no hunts occurred in RG478 or RG479 because quotas were met during the drawing hunt season, there have been an average of 143 permits (range 130-163) issued annually to archery hunters. On average, there were 51 archery hunters afield each year, who harvested 11 goats annually (range 8-14). Harvest by archery hunters occurs primarily in November and December with 72.1% and 27.9% of the harvest occurring during these months, respectively. Archery hunters have an average 5-year success rate of 21.9%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to allow the use of muzzleloaders for goat hunting in restricted weapons registration hunts RG478 and RG479 on the Kodiak Road System because of the allocative nature of the proposal.

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

PROPOSAL 98 – 5 AAC 85.020. Hunting seasons and bag limits for brown bear.

PROPOSED BY: Greg Acord

WHAT WOULD THE PROPOSAL DO? This proposal would lengthen the fall hunting season for brown bear in Unit 8 by 15 days by changing the start date of the fall brown bear hunt from October 25 to October 10.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 8, that portion of Kodiak Island and adjacent islands, including all drainages into Chiniak, Anton Larsen, and northeast Ugak (east of Saltery Creek drainage) Bays	Oct. 25–Nov. 30 (General hunt only)	Oct. 25–Nov. 30 Apr. 1–May 15
	Apr. 1–May 15 (General hunt only)	

1 bear every 4 regulatory years
by registration permit only

Remainder of Unit 8

Apr. 1–May 15
(General hunt only)
Oct. 25–Nov. 30
(General hunt only)

Apr. 1–May 15
Oct. 25–Nov. 30

1 bear every 4 regulatory years
by permit only; as provided in
5 AAC 92.061

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If adopted this proposal could result in increased hunter success and increased brown bear harvest as the hunting season would begin 15 days earlier, allowing hunters more daylight hours to hunt. In addition, hunters would likely be less affected by weather conditions which commonly begin to deteriorate in late-October and early-November. This proposal may also result in increased harvest of pregnant females and/or females with young as these reproductive classes typically do not start denning until mid- to late October. An increase in harvest, particularly an increase in female harvest, could result in the need to reduce the number of permits available for some hunt areas. Additionally, because some hunt areas only have 1 permit issued per season, increased harvest may result in permits in these areas only being issued every other year/season, which may require additional board action. .

BACKGROUND:

Kodiak bear hunts are considered one of the premier hunts in the world and are one of Kodiak’s foremost trophy hunts. The Kodiak bear population has been managed to promote a healthy, stable population that produces trophy-quality males while providing sustained hunting opportunities for hunters. One of the primary objectives of Kodiak’s bear management strategy is to limit human-caused mortality of female bears while maintaining a population that will sustain an annual harvest composed of at least 60% males. This strategy has been successful as Kodiak consistently produces some of the largest brown bears in the world while providing high-quality, sustained hunting opportunities. Kodiak brown bear hunts are split into 2 seasons, a spring hunt that runs from April 1–May 15, and a fall hunt that runs from October 25–November 30. Both seasonal hunts are comprised of a registration hunt that primarily occurs on the Kodiak Road System, and a drawing hunt that occurs throughout the rest of the island (and adjacent islands). There are 500 drawing permits issued annually for Kodiak brown bears (180 in fall; 320 in spring) and, on average, 750 registration permits (340 in fall; 410 spring). Hunter success rates vary by season and permit type, but over the last 5 years fall season success rates averaged

11.1% (spring 17.2%) for registration hunts and 44.7% (spring 52.2%) for drawing hunts. Successful fall hunters spend an average of 5.2 days in the field before harvesting a bear. On average, 82.3% of female bears harvested during fall are harvested during October 25–November 6; 14.7% are harvested during November 7–November 18; and 3.0% are harvested during November 19–November 30. In general, pregnant females begin to enter dens around October 15, females with young begin to enter dens around October 17, and lone females begin to enter dens around October 21, while male bears begin to enter dens around November 4. In the last 5 years, Kodiak bear hunts (drawing and registration hunts combined) averaged 22 females and 35 males harvested in the fall (approximately a 62% male harvest).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to lengthen the fall hunting season for brown bear in Unit 8 by 15 days.

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

PROPOSAL 99 – 5 AAC 92.061. Special provisions for brown bear drawing permit hunts.

PROPOSED BY: Robert Cassell

WHAT WOULD THE PROPOSAL DO? This proposal would allocate at least 90% of the Unit 8 brown bear drawing permits to residents with the remaining drawing permits available to residents and non-residents.

WHAT ARE THE CURRENT REGULATIONS?

...

(a) In the Unit 8 general brown bear drawing permit hunt, the department shall issue permits, and a hunter may apply for a permit, as follows:

- (1) the department shall issue a maximum of 40 percent of the drawing permits to non-residents and a minimum of 60 percent to residents; each guide may submit the same number of nonresident applications for a hunt as the number of permits available for that hunt;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If a higher percentage of residents participate in Kodiak bear drawing hunts compared to historical averages, an increase in female harvest is likely. Similarly, if resident success rates increase compared to historical averages, an increase in female harvest is also likely. Both scenarios may result in a decrease in the number of drawing permits issued for Kodiak brown bears. Interestingly, if the participation and success rate of resident hunters remains similar to the previous 5-year average, female harvest will effectively remain unchanged, but overall harvest will diminish. The current Kodiak bear hunting system has been in place for many years providing well established hunter success and harvest patterns that are used to establish permit quotas and harvest objectives. If adopted, this proposal will require Kodiak staff to closely and diligently monitor harvest demographics, hunter effort, and hunter success rates for the foreseeable future and may require an initial reduction in permits while new harvest and hunter use patterns become established.

BACKGROUND:

The Kodiak brown bear population has a long history of producing some of the largest bears in the world. The population has been managed to promote a healthy, stable population that consistently produces high-quality trophy males while providing sustained hunting opportunities for hunters. One of the primary objectives of Kodiak's bear management strategy is to limit human-caused mortality of female bears while maintaining a population that will sustain an annual harvest composed of at least 60% males. This strategy has been successful as Kodiak consistently produces some of the largest brown bears in the world while providing high-quality, sustained hunting opportunities. Current regulations require a minimum of 60% of the Kodiak bear drawing permits be issued to Alaska residents and a maximum of 40% of drawing permits be allocated to non-residents. All non-residents are required to obtain a registered guide for their hunt. Because most guides require hunters provide a monetary deposit prior to the hunt, non-residents often have a much higher participation rate than residents. The average participation rate for non-residents and residents over the past 5 years was 89.7% and 55.7%, respectively indicating roughly 9 in 10 non-residents receiving drawing permits participate in the hunt while roughly 6 in 10 residents receiving drawing permits participate in the hunt.

Because non-resident hunters are required to hunt with a licensed guide, success rates, and harvested bear demographics vary compared to resident harvest. Based on harvest data the previous 5-years (RY13-RY17), non-residents and residents have an overall (combined spring and fall seasons) success rate of 62.0% and 38.4%, respectively for brown bear drawing hunts. Non-residents, on average, harvest fewer females than residents during brown bear drawing hunts with a 5-year average of 16 and 26 females harvested annually for non-residents and residents, respectively. On average, 17.1% of non-resident harvest is comprised of females and 36.3% of resident harvest is comprised of females. In the past 5-years, the total harvest (823 bears) consisted of 9.7% (n=80) females harvested by non-residents, 15.7% (n=129) females harvested by residents, 47.1% (n=388) males harvest by non-residents, and 27.5% (n=226) males harvest by residents. During RY12-RY16, brown bear age estimates for non-residents averaged

9.8 years with an average skull size of 25.2 inches. During the same period brown bear (male and female combined) age estimates for residents averaged 7.6 years with an average skull size of 23.7 inches.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to allocate at least 90% of the Unit 8 brown bear drawing permits to residents with the remaining drawing permits available to residents and non-residents on the same terms because of the allocative nature of the proposal.

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

PROPOSAL 100 – 5 AAC 92.061. Special provisions for brown bear drawing permit hunts.

PROPOSED BY: Kodiak Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal would create a separate drawing for second degree of kindred brown bear permits in Unit 8 and would reduce the number of second-degree of kindred permits from up to 4 per season (spring/fall) to up to 4 in the spring and up to 2 in the fall.

WHAT ARE THE CURRENT REGULATIONS?

...

(a) In the Unit 8 general brown bear drawing permit hunt, the department shall issue permits, and a hunter may apply for a permit, as follows:

...

- (1) the department shall enter, in a resident drawing, each application from a resident and each application from a nonresident accompanied by a resident relative who is within the second degree of kindred; for each season, the department shall issue a maximum of four permits to nonresident hunters accompanied by a resident relative who is within the second degree of kindred; however, the department may not issue, within one calendar year, more than one of these permits per individual hunt, as described in the permit hunt guide published each year by the department;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted, this proposal would create a separate drawing for brown bear permits in Unit 8 for non-resident hunters within second degree of kindred and would reduce the number of second degree of kindred permits from up to 4 per season (8 total) to up to 4 in the spring and up to 2 in the fall (6 total).

BACKGROUND:

Currently, there are up to 8 (4 spring, 4 fall) second degree of kindred permits issued annually to non-residents hunting with a resident within second degree of kindred. On Kodiak, second degree of kindred brown bear permits are currently taken out of the resident permit allocation. This second degree of kindred permit allocation is unique to Kodiak. In other areas of the state, all non-resident second degree of kindred hunts are taken from the non-resident allocation rather than the resident allocation. Over the last 5 years (10 seasons), a total of 28 second degree of kindred hunters have participated in Kodiak brown bear drawing hunts and have harvested 12 bears (7 male, 5 female) resulting in an average 40.3% success rate.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to create a separate drawing for second degree of kindred brown bear permits in Unit 8 that would reduce the number of second degree of kindred permits from up to 4 per season (spring/fall) to up to 4 in the spring and up to 2 in the fall because of the allocative nature of the proposal.

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

PROPOSAL 101 – 5 AAC 92.061. Special provisions for brown bear drawing permit hunts.

PROPOSED BY: Brad Sparks

WHAT WOULD THE PROPOSAL DO? Create a resident tag for Kodiak brown bear from the nonresident permit allocation. Create a pool of special Kodiak bear permits currently with the nonresident guided allocation that are also available to residents. No additional permits are added to this pool. To be placed in the drawing, an Alaskan resident would have to be willing to pay the same amount as a nonresident for the brown bear locking tag, which is currently \$1,000.

WHAT ARE THE CURRENT REGULATIONS?

NOTE: Resident and nonresident tag fees are set in Alaska statute

...

(a) In the Unit 8 general brown bear drawing permit hunt, the department shall issue permits, and a hunter may apply for a permit, as follows:

...

(3) the department shall issue a maximum of 40 percent of the drawing permits to non-residents and a minimum of 60 percent to residents; each guide may submit the same number of nonresident applications for a hunt as the number of permits available for that hunt;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Note: Because resident and nonresident tag fees are set in Alaska statute, the Board of Game does not have authority to modify the locking tag fees.

BACKGROUND:

Kodiak bear hunts are considered one of the premier hunts in the world regularly attracting hunters from all corners of the earth. The strong interest and high demand to hunt Kodiak bears makes bear hunting permits highly competitive and often difficult to obtain. There are 500 Kodiak brown bear permits issued annually of which 320 are issued in the spring and 180 issued in the fall. Of the 320 permits issued in the spring, 215 are issued to residents and 105 are issued to non-residents. Of the 180 permits issued in the fall, 116 are issued to residents and 64 are issued to non-residents. All non-residents hunting brown bear on Kodiak are required to hunt with a registered guide and, because most registered guides require a non-refundable monetary deposit, non-resident hunters often have a higher ‘show-up rate’ (i.e., number of hunters participating in the hunt) than residents. The average show-up rate for non-residents and residents over the past 5 years was 89.7% and 55.7%, respectively, indicating roughly 9 in 10 non-residents receiving drawing permits participate in the hunt while roughly 6 in 10 residents receiving drawing permits participate in the hunt. Both residents and non-residents are required to obtain a brown bear locking tag prior to the hunt. The cost of a resident brown bear locking tag is \$25 and the cost of a non-resident brown bear locking tag is \$1,000 (non-resident alien locking tags are \$1,300). Resident and non-resident locking tag fees are determined by the Alaska legislature and cannot be modified or adjusted by the Alaska Board of Game.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to create a resident tag for Kodiak brown bear from the nonresident permit allocation because of the allocative nature of the proposal.

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

PROPOSAL 102 – 5 AAC 85.020. Hunting seasons and bag limits for brown bear.

PROPOSED BY: Resident Hunters of Alaska

WHAT WOULD THE PROPOSAL DO? This proposal would eliminate non-resident opportunity for the Kodiak brown bear registration hunts RB230 and RB260. If adopted, only Alaska residents could participate in the existing Kodiak brown bear registration hunts.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 8, that portion of Kodiak Island and adjacent islands, including all drainages into Chiniak, Anton Larsen, and northeast Ugak (east of Saltery Creek drainage) Bays	Oct. 25–Nov. 30 (General hunt only)	Oct. 25–Nov. 30 Apr. 1–May 15
	Apr. 1–May 15 (General hunt only)	
1 bear every 4 regulatory years by registration permit only		
...		

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

This proposal would eliminate non-resident hunting opportunities for the Kodiak brown bear registration hunts RB230 and RB260. If adopted, only Alaska residents could participate in Kodiak brown bear registration hunts on the Kodiak road system. This proposal would have a limited effect on resident hunters because there is an unlimited number of registration permits available for these registration hunts (i.e., any eligible hunter can obtain a permit during the season). This proposal would eliminate hunting opportunities for guided non-resident hunters on the Kodiak road system.

BACKGROUND:

In 2002 the Alaska Department of Fish and Game, in cooperation with many partners, worked to complete the *Kodiak Archipelago Bear Conservation and Management Plan*. One of the considerations recognized in this plan was to identify and address a “Wildlife Acceptance Capacity”, also referred to as social carrying capacity, along the Kodiak road system. Social carrying capacity is the idea that the human social environment (i.e., community) determines the number of species or individuals (i.e., bears) that can be tolerated in an area. This differs from biological carrying capacity in that biological carrying capacity pertains to the number of individuals an area can sustain considering the limiting biological factors. Kodiak residents recognize the need to have lower bear abundance in areas where interactions with bears and humans is undesirable, which includes the Kodiak road system. One mechanism that reduces the number of bears on the Kodiak road system is the brown bear registration hunt. There are 2 brown bear registration hunts on the Kodiak road system; the spring hunt runs from April 1–May 15 and the fall hunt runs from October 25–November 30. Brown bear registration hunts are open to both residents and non-residents who are hunting with a guide or with a resident relative within second degree of kindred.

Registration permits for the Kodiak road system are unlimited; however, like Kodiak brown bear drawing hunts, hunters are limited to 1 bear every 4 regulatory years. On average during the past 5 years, non-residents have been issued 28 brown bear registration permits and residents have been issued 219 permits annually. However, it is important to recognize many residents living on Kodiak Island obtain brown bear registration permits but do not necessarily intend to actively hunt a bear. Permits are often obtained “just in case” an opportunity arises to harvest a bear or if a bear has been causing a concern near their home or property. On average during the last 5 years, 53.7% of residents obtaining registration permits hunted and 98.4% of non-residents obtaining permits hunted. On average, residents harvest 10.2 bears per year and non-residents harvest 10.0 bears per year. However, the number of non-residents obtaining permits and harvesting bears on the road system has increased the last 3 years. On average, resident hunters (who actively hunt) have an 8.6% success rate and non-resident hunters have a 35.5% success rate when hunting on the Kodiak road system. In the last 5 years, 12 hunters hunting with a resident relative within second degree of kindred obtained registration permits on the Kodiak road system and 1 hunter successfully harvested a male bear.

	Permits		Hunted				Harvest		Mean Success Rate	
	Res	Non-res	Res	% Hunted	Non-res	% Hunted	Res	Non-res	Res	Non-res
2013	245	18	135	55.1%	18	100.0%	14	6	10.4%	33.3%
2014	227	17	105	46.3%	17	100.0%	7	5	6.7%	29.4%
2015	203	34	117	57.6%	34	100.0%	9	10	7.7%	29.4%
2016	221	33	120	54.3%	32	97.0%	9	16	7.5%	50.0%
2017	198	39	109	55.1%	37	94.9%	12	13	11.0%	35.1%

Mean 218.8 28.2 117.2 53.7% 27.6 98.4% 10.2 10.0 8.6% 35.5%

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to eliminate non-resident opportunity for the Kodiak brown bear registration hunts RB230 and RB260 because of the allocative nature of the proposal.

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

PROPOSAL 103 – 5 AAC 92.061. Special provisions for brown bear drawing permit hunts.

PROPOSED BY: Resident Hunters of Alaska

WHAT WOULD THE PROPOSAL DO? This proposal would transfer under-subscribed non-resident Kodiak brown bear drawing permits to the resident drawing permit allocation. If no applications are received for any available permit by the application deadline, that permit or permits will be transferred to the resident pool of available permits.

WHAT ARE THE CURRENT REGULATIONS?

...

(a) In the Unit 8 general brown bear drawing permit hunt, the department shall issue permits, and a hunter may apply for a permit, as follows:

- (1) ...
- (2) ...
- (3) the department shall enter, in a guided nonresident drawing, each complete application from a nonresident who will be accompanied by a guide; the department may enter an application and issue a drawing permit for the general hunt only to a successful nonresident applicant who presents proof at the time of application that the applicant will be accompanied by a guide, as required under AS 16.05.407 or 16.05.408;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted this proposal would transfer any under-subscribed non-resident Kodiak brown bear drawing permits to the resident drawing permit application. This may result in a slightly

increased harvest as the unused permits would go to residents who may participate in the hunt. However, because under-subscribed hunts are rare and low in number, the potential additional harvest would likely be minimal and have little impact on the overall population.

BACKGROUND:

Unit 8 is comprised of 31 Kodiak brown bear drawing hunt areas open to both resident and non-resident hunters through an application process. Non-resident hunters who are citizens of the United States are required to be personally accompanied in the field by an Alaska-licensed guide or be accompanied by a relative within second degree of kindred that is 19 years of age or older when hunting Kodiak brown bears. Residents and guides (on behalf of their non-resident clients) may apply for a Kodiak brown bear drawing permit to hunt in any of the 31 hunt areas. Resident applicants can apply for up to 6 hunts and may apply for the same hunt more than once. Guided non-residents may only apply once for a single fall brown bear hunt and only once for a spring brown bear drawing hunt. In addition, guides may only submit as many hunt applications for their clients as permits available for that hunt.

If a hunt area receives fewer applicants than available permits, the drawing hunt area is considered 'undersubscribed'. When undersubscribed Kodiak brown bear permits are available for a hunt area, the Kodiak office will issue the remaining permits on a first-come, first-served basis starting on a pre-determined date prior to the hunt (the date is published annually in the hunt supplement and typically occurs 1-2 months prior to start of the hunt). Undersubscribed hunts for Kodiak brown bear are not common, in the past 10 years (20 brown bear seasons), 10 hunt areas were undersubscribed and 10 brown bear drawing permits were made available on a first-come, first-served basis.

It is important to note there are several brown bear hunt areas on Kodiak that are either entirely or partially comprised of an Exclusive Guide Use Area. Exclusive Guide Use Areas are areas in which only certain guides are permitted to take non-resident bear hunters (resident hunters are still allowed to hunt in these areas). Guided non-resident hunters wishing to hunt in these areas are only permitted to hunt with the exclusive guide registered for that area. Because some hunt areas are entirely comprised of an Exclusive Guide Use Area in which only one guide is allowed to take clients, some guides choose not to submit hunt applications for their clients in these areas. Unfortunately, this can lead to confusion when hunters seeking information about their odds of being drawn for a specific hunt area use the Alaska Drawing Permit Hunt Supplement (i.e., percent applications drawn). Exclusive guide use hunt areas in which guides do not submit their client applications appear to have very few or no applications submitted for the area and appear to be undersubscribed. However, these permits are most often allocated to clients of guides with exclusive guiding privileges and no permits are available for these areas.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to transfer under-subscribed non-resident Kodiak brown bear drawing permits to the resident drawing permit allocation because it is allocative in nature.

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

PROPOSAL 104 – 5 AAC 92.061. Special provisions for brown bear drawing permit hunts.

PROPOSED BY: Brad Sparks

WHAT WOULD THE PROPOSAL DO? This proposal would allow residents to return Kodiak brown bear drawing permits in advance of the hunting season to be reissued to residents as follows: One tag every four years should be based on opportunity, not harvest; create an alternate list to encourage every tag being hunted.

WHAT ARE THE CURRENT REGULATIONS?

...

(a) In the Unit 8 general brown bear drawing permit hunt, the department shall issue permits, and a hunter may apply for a permit, as follows:

- (1) ...
- (2) the department shall enter, in a resident drawing, each application from a resident and each application from a nonresident accompanied by a resident relative who is within the second degree of kindred; for each season, the department shall issue a maximum of four permits to nonresident hunters accompanied by a resident relative who is within the second degree of kindred; however, the department may not issue, within one calendar year, more than one of these permits per individual hunt, as described in the permit hunt guide published each year by the department;

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted, this proposal would allow residents who are drawn for permits but unable to participate in the brown bear hunt to return their Kodiak brown bear drawing permits in advance of the hunting season to be reissued to residents through an alternate list. This proposal would

likely increase the number of hunters participating in Kodiak bear hunts and would presumably increase harvest considerably as hunter effort would increase. The current Kodiak bear hunting system has been in place for many years providing well established hunter success and harvest patterns that are used to establish permit quotas and harvest objectives. To prevent potential overharvest, if adopted, this proposal would require ADF&G to reduce the number of available brown bear permits indefinitely until new harvest and hunter use patterns become established.

BACKGROUND:

The current Kodiak permitting system has been in place for many years providing well-established hunter effort, hunter success, and harvest patterns that provide ADF&G biologists long-term datasets used to establish harvest objectives and permit quotas. Management objectives and permit quotas are established using these dependable patterns of use. Current regulations require a minimum of 60% of the Kodiak bear drawing permits be issued to Alaska residents. There are 500 drawing permits issued annually for Kodiak brown bears (320 in spring; 180 in fall). Of the 320 permits issued in the spring, 215 are issued to residents; of the 180 permits issued in the fall, 116 are issued to residents. Hunter effort and hunter success rates of residents have maintained a consistent pattern with the show-up rate for residents over the past 5 years averaging 55.7%, indicating roughly 6 in 10 residents receiving drawing permits participate in the hunt. Residents have an overall (combined spring and fall seasons) average success rate of 38.4% for brown bear drawing hunts and, on average, 36.3% of resident harvest is comprised of female bears. During RY12-RY16, brown bear age estimates for residents averaged 7.6 years with an average skull size of 23.7 inches.

Current management objectives include maintaining a stable brown bear population that will sustain an annual harvest composed of at least 60% males and does not exceed 6% of the estimated population. The current permitting system has proven to be successful as Kodiak Island continues to provide sustainable brown bear hunting opportunities while consistently producing some of the largest trophy brown bears in the world. Below is a matrix providing projected harvest numbers if there is an increase (10%-40%) in resident hunt participation rates and an increase (0%-40%) in resident success rate for Kodiak brown bear drawing hunts. These scenarios assume all other parameters (e.g., non-resident participation rates and success rates) remain similar to the 5-year average. A 10%, 20%, 30%, and 40% increase in resident participation rates would increase the number of hunters by 33, 66, 99, and 132, respectively. Numbers and percentages represented underlined and in bold font indicate thresholds where harvest objectives are exceeded requiring a reduction in the number of permits issued.

Total Bear Harvest						
		% increase in Success Rate				
% increase in Participation		0	10	20	30	40
	10	179	201	<u>223</u>	<u>245</u>	<u>266</u>
20	192	<u>217</u>	<u>243</u>	<u>268</u>	<u>293</u>	

rate	30	205	<u>234</u>	<u>262</u>	<u>291</u>	<u>319</u>
	40	<u>218</u>	<u>250</u>	<u>281</u>	<u>313</u>	<u>345</u>

% of Bear Population @ 3,500 bears						
		% increase in Success Rate				
% increase in Participation rate		0	10	20	30	40
	10	5.1%	5.7%	<u>6.4%</u>	<u>7.0%</u>	<u>7.6%</u>
	20	5.5%	<u>6.2%</u>	<u>6.9%</u>	<u>7.6%</u>	<u>8.4%</u>
	30	5.9%	<u>6.7%</u>	<u>7.5%</u>	<u>8.3%</u>	<u>9.1%</u>
	40	<u>6.2%</u>	<u>7.1%</u>	<u>8.0%</u>	<u>8.9%</u>	<u>9.9%</u>

% Female Harvest						
		% increase in Success Rate				
% increase in Participation rate		0	10	20	30	40
	10	26.4%	27.4%	28.3%	29.0%	29.6%
	20	27.0%	28.1%	28.9%	29.6%	30.2%
	30	27.6%	28.6%	29.4%	30.1%	30.6%
	40	28.1%	29.1%	29.9%	30.5%	31.0%

Potential reduction in permits						
		% increase in Success Rate				
% increase in Participation rate		0	10	20	30	40
	10	0	0	<u>35</u>	<u>74</u>	<u>104</u>
	20	0	<u>23</u>	<u>71</u>	<u>106</u>	<u>133</u>
	30	0	<u>57</u>	<u>99</u>	<u>131</u>	<u>157</u>
	40	<u>25</u>	<u>83</u>	<u>122</u>	<u>153</u>	<u>176</u>

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to allow residents to return Kodiak brown bear drawing permits in advance of the hunting season to be reissued to residents.

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

PROPOSAL 105 – 5 AAC 85.020. Hunting seasons and bag limits for brown bear.

PROPOSED BY: Michael Zweng

WHAT WOULD THE PROPOSAL DO? This proposal would adjust the boundaries of the Kodiak brown bear drawing hunt areas for Kiliuda Bay and Ugak Bay.

WHAT ARE THE CURRENT REGULATIONS?

...

Remainder of Unit 8	Apr. 1–May 15 (General hunt only) Oct. 25–Nov. 30 (General hunt only)	Apr. 1–May 15 Oct. 25–Nov. 30
---------------------	--	----------------------------------

1 bear every 4 regulatory years
by permit only, as provided in
5 AAC 92.061

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted, this proposal would move the northern boundary of hunt unit 04 to the south to align with the state/federal property boundary (see Figure 1). This change would reduce the size of hunt unit 04 by approximately 1/3 of its current extent and expand hunt area 02 by approximately 1/3. This proposal would make the land ownership of hunt area 04 entirely federal land, rather than the current mix of state and federal land. It would also result in a single guide having exclusive guiding privileges in hunt area 04 preventing other guides from guiding in the area similar to other guide areas comprised entirely of federal land. In addition, this proposal may increase the number of guides accessing hunt unit 02. Currently, there are 5 guides registered to hunt in area 02 and 5 guides registered to hunt in area 04, only one of which can guide on federal land. If this proposal is adopted, only 1 guide would be permitted to hunt in area 04 as it would be entirely comprised of federal land (an exclusive guide use area) and may result in the remaining 9 guides competing for permits/clients for hunt area 02. This proposal would also require ADF&G to adjust the number of permits for both areas to reflect changes in area size and bear abundance/area.

BACKGROUND:

Kodiak Island is comprised of 31 Kodiak brown bear drawing hunt areas open to both resident and non-resident hunters through an application and random lottery process. Non-resident hunters who are citizens of the United States are required to be personally accompanied in the field by an Alaska-licensed guide or be accompanied by a relative within second degree of

kindred that is 19 years of age or older when hunting Kodiak brown bears. Non-resident aliens (not residents of the United States) are also required to be personally accompanied by an Alaska-licensed guide. Alaska-licensed guides can register to take clients in a maximum of 3 hunt areas throughout the state. Of the 31 brown bear hunt areas throughout Kodiak Island, 21 are classified partially or entirely as Exclusive Guide Use Areas. Exclusive Guide Use Areas are areas in which a single guide is granted sole access to hunt on federal lands within these areas. Guides for these exclusive guide use areas are selected through a highly competitive application and proposal ranking process through the U.S. Fish and Wildlife Service. Guides are granted exclusive guiding privileges for these areas for 8-10 years at which time the proposal process is reinstated and guides can once again compete for exclusive access to these areas.

Hunt area 04 (Kiliuda Bay) is comprised of both state and federal lands with one guide having exclusive guide use privileges for the federal lands within hunt area 04. Hunt area 04 has 4 additional guides registered to hunt in the area and has 8 brown bear permits (5 resident, 3 non-resident) available in the spring and 7 brown bear permits (4 resident, 3 non-resident) available in the fall. Hunt area 02 (West Ugak Bay) is comprised primarily of state land with 5 guides currently registered to hunt in this area. There are 7 brown bear permits (4 resident, 3 non-resident) available in the spring and 9 brown bear permits (5 resident, 4 non-resident) available in the fall for hunt area 02. Over the past 5 years, on average 1.7 bears have been harvested by residents per year and 1.5 bears have been harvested by non-residents per year in hunt area 04 (Kiliuda Bay); and on average 0.4 bears have been harvested by residents per year and 1.9 bears have been harvested by non-residents per year in hunt area 02 (West Ugak Bay).

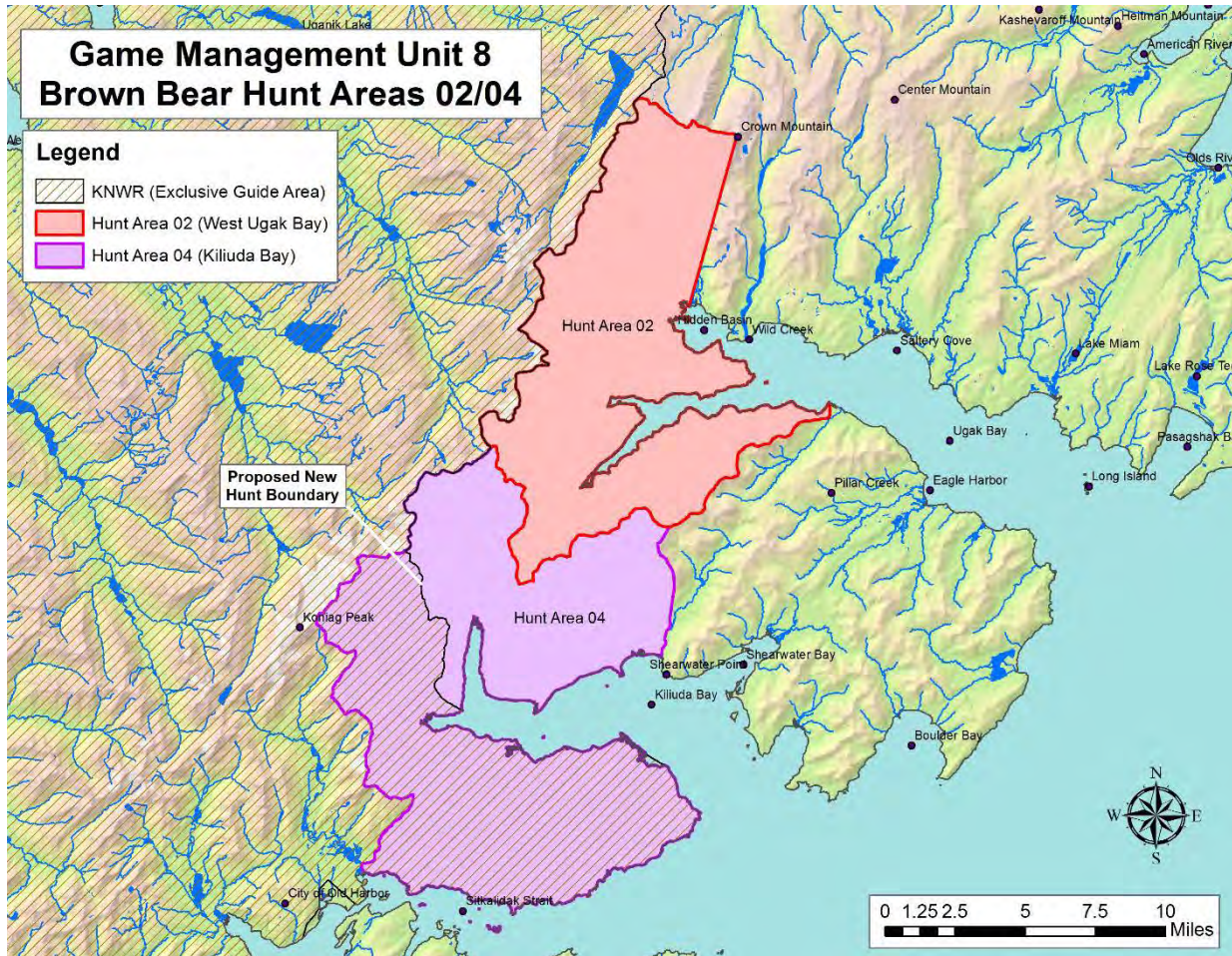


Figure 1. Proposed boundary changes to Kodiak brown bear hunt areas 02 and 04 for Alaska Board of Game meeting, March 2019.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to change the boundaries for hunt areas 02 and 04.

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

PROPOSAL 106 – 5 AAC 92.132. Bag limit for brown bears.

PROPOSED BY: Brad Sparks

WHAT WOULD THE PROPOSAL DO? This proposal would require the Department to provide additional educational material to Kodiak brown bear hunters to encourage the harvest of male bears and penalize hunters for taking females.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.132. Bag limits for brown bears. A person may not take more than one brown bear every four regulatory years, except that

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted, this proposal would require the Department to provide additional educational materials to Kodiak brown bear hunters regarding identifying differences between male and female bears when hunting. In addition, this proposal would penalize hunters who harvest female bears by preventing them from drawing another Kodiak brown bear tag for 8 years, and if a guided hunter harvests a female, the guide would lose a future tag in his/her area. This proposal would promote further educating hunters on methods to identify bear gender prior to going hunting. It may also reduce the number of females harvested each year as hunters would presumably be more diligent about sex identification prior to shooting a bear.

BACKGROUND:

Kodiak brown bear hunts are closely managed and all hunters obtaining Kodiak brown bear permits are required to pick up their permit at the Alaska Department of Fish and Game office in Kodiak prior to going hunting. All hunters receiving Kodiak brown bear drawing permits are sent a letter a few months prior to their hunt providing general information about the hunt as well as outlining rules and regulations pertaining to bear hunting on Kodiak. The letter each hunter receives includes information on obtaining tags, reporting requirements, and hunter safety as well as encourages hunters to visit the ADF&G Kodiak bear hunting webpage to learn more about hunting on Kodiak, including information on identifying male and female bears. In addition to receiving a letter in the mail, when hunters arrive at the Kodiak office to obtain their permit, they are required to attend a 2–3-minute presentation covering the Kodiak Bear Hunter Checklist. This presentation covers various topics including expectations of the hunt, current hunting regulations, information regarding legal animal requirements, as well as reporting requirements for successful and unsuccessful hunters. After the presentation and when receiving their permit each hunter is provided an Alaska Department of Fish and Game booklet titled, “Brown Bear: Identifying males and females in the field”. Hunters are encouraged to read the booklet and review the methods to identify male and female bears in the field prior to going hunting.

One of Kodiak’s brown bear management objectives is to maintain a stable brown bear population that will sustain an annual harvest composed of at least 60% males. To prevent female harvest from exceeding 40%, Kodiak staff provide different resources to hunters specifically addressing the identification of male and female bears. It appears these efforts have been successful as average annual harvest of females very rarely exceeds 40% of the overall harvest. Over the past 10-years, the mean female harvest for drawing and registration hunts

combined comprised 26.8% of the overall harvest. Kodiak Island has a robust, healthy, and stable brown bear population that consistently produces high-quality trophy males while providing sustained hunting opportunities for hunters.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. Extensive material is available to hunters to assist in identifying male and female brown bears. Current female bear harvest is sustainable and within management objectives.

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

PROPOSAL 107 – 5 AAC 92.080. Unlawful methods of taking game; exceptions.

PROPOSED BY: Jack Harris

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit shooting from a boat while hunting in the Ugak Bay area in Unit 8 as follows: From a line drawn between Gull and Pasagshak Point eastward up the bay, shooting from a boat, moving or not, for other than waterfowl, is prohibited.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.080. Unlawful methods of taking game; exceptions.

...

(4) unless otherwise provided in this chapter, from a motor-driven boat or a motorized land vehicle, unless the motor has been completely shut off and the progress from the motor's power has ceased, except that a

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted, this proposal would prohibit hunters, except waterfowl hunters, from shooting from a boat while hunting in Ugak Bay. This proposal would presumably increase safety in the area by preventing boat-based hunters from shooting ashore where cabins and homes are occupied during much of the year. Ugak Bay is a popular area for boat-based deer hunters who regularly motor along the beaches in search of deer. Some deer hunters who employ this method may be negatively impacted if they are unable to shoot deer from a boat and would be required to hunt on foot or seek another location in which to hunt from a boat. Adoption of this proposal may

result in a reduction in wounding loss of deer and deer that were unrecoverable by boat-based hunters.

BACKGROUND:

Ugak Bay is a popular area for deer hunting with approximately 250 deer harvested in the area each year. Boat-based hunting is a popular means to obtain deer for many of Kodiak residents. The issue of shooting big game from boats has biological and sociological significance and has come before the Board several times in the past (most recently in 2007). Arguments in support center on it being an established method and a means to enhance hunter success. Arguments against boat-based hunting usually include discussions of wounding loss and hunter ethics (i.e., fair chase). Because shooting from a moving surface is undoubtedly more difficult, boat-based hunting may increase wounding loss and potentially increases the number of unrecoverable animals. However, because wounding loss is difficult to estimate there are no reliable estimations on how boat-based hunting affects wounding loss.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to prohibit shooting from a boat while hunting in the Ugak Bay area in Unit 8.

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

PROPOSAL 108 – 5 AAC 92.540 Controlled use areas.

PROPOSED BY: Greg Acord

WHAT WOULD THE PROPOSAL DO? This proposal would create a controlled use area on the Ayakulik River in Unit 8 by limiting the type of outboard motor used on the river to four-stroke only.

WHAT ARE THE CURRENT REGULATIONS?

There are currently no regulations regarding Controlled Use Areas in Unit 8.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

The proposal would prevent hunters and fishermen from accessing the Ayakulik River using a boat outfitted with a 2-stroke motor. Because the Ayakulik River is a popular sport fishing and hunting area often accessed by boat, user groups who only have access to 2-stroke motors may be negatively affected by this proposal. Some hunt areas up river that are regularly accessed by hunters may be inaccessible by some unless other means of transportation are available. If adopted, this proposal would reduce the amount of aquatic and terrestrial noise pollution along the river that may be affecting certain wildlife species.

BACKGROUND:

The Ayakulik River is located on the south end of Kodiak Island and is entirely within the Kodiak National Wildlife Refuge. The Ayakulik is a popular deer and bear hunting river that regularly attracts numerous resident and non-resident hunters as well as fishermen. Deer hunters have historically rafted the upper sections of the river with little to no impact regarding noise pollution. However, in recent years there have been various complaints regarding deer hunters running their motorized boats up and down the upper river making it difficult for bear hunters to harvest bears.

Research into the effects of noise pollution on wildlife has been growing rapidly since the 1970’s. Although some results can be difficult to disentangle because of the variety of mechanisms and factors that may be at play, most researchers agree that noise pollution can negatively affect animal behavior, physiology, reproductive success, and long-term survival, particularly if the noise is sustained and frequent. However, determining how much noise is too much varies considerably by area, species, source, etc., and it can be difficult to ascertain and should be assessed independently for each area of concern.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to create a controlled use area on the Ayakulik River in Unit 8 by limiting the type of outboard motor used on the river to four-stroke only.

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

PROPOSAL 109 – 5 AAC 92.095. Unlawful methods of taking furbearers.

PROPOSED BY: Kodiak Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal would require all snares on the Kodiak road system to have a breakaway mechanism (of a designated minimum poundage) on the loop end of the snare and the snare cable and anchor must be stronger than the breakaway mechanism.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.095. Unlawful methods of taking furbearers; exceptions.

(a) The following methods and means of taking furbearers under a trapping license are prohibited, in addition to the prohibitions in 5AAC 92.080:

...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

If adopted, this proposal would require all snares used for trapping on the Kodiak road system be outfitted with a breakaway mechanism attached on the loop end of the snare. This proposal would reduce the number of non-target species captured and detained in snares and would reduce the severity of injuries inflicted by animals captured by non-relaxing or non-breakaway snares. Trappers would be required to outfit all snares with breakaway mechanisms which may be time consuming and require additional costs, although presumed costs are anticipated to be minimal as most breakaway mechanisms are relatively inexpensive.

BACKGROUND:

Snaring is one of the oldest methods used to capture wild animals and has evolved significantly with the creation of braided cable, swivels, locking mechanisms, and other components to increase efficiency and productivity. In some areas and in some states, the use of snares has been restricted due to public concern over snares capturing non-target species. In response to these concerns there has been a recognized need and an effort to develop and improve breakaway lock mechanisms to avoid injury to non-target species.

On Kodiak Island, trapping season is open year around for some species (squirrel, marmot), but most trapping, particularly snaring, does not occur until November, December, and January when fox, beaver, and river otter seasons are open as these species are the most desirable. Despite most snaring occurring during the fall and winter months, in both 2016 and 2017 ADF&G Kodiak staff received multiple calls of brown bears captured in foot snares initially set to capture fox. Since 2016 ADF&G has observed and handled 2 bears caught in foot snares and has dispatched 2 additional bears due to significant injuries inflicted by foot snares not equipped with breakaway mechanisms. In addition to the wildlife species reported to ADF&G, each year the Kodiak ADF&G office also receives complaints of domestic animals caught in snares along the Kodiak road system, particularly in popular, high traffic areas. Although trapping and snaring is a popular pastime for many residents of Kodiak, recent incidents along the Kodiak road system have resulted in a public plea to adopt additional regulations that provide a safety mechanism for non-target species caught in snares on the Kodiak road system.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal to require all snares on the Kodiak road system to have a breakaway mechanism (of a designated minimum poundage) on the loop end of the snare and the snare cable and anchor must be stronger than the breakaway mechanism.

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

PROPOSAL 120– 5 AAC 92.044 Permit for hunting bear with the use of bait or scent lures and 5 AAC 92.530(3) Management Areas.

PROPOSED BY: Phillip Calhoun.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to establish a weapons restricted registration black bear baiting season within the Anchorage Management Area.

WHAT ARE THE CURRENT REGULATIONS? See Proposal 117 for 5 AAC 92.530 (3).

5AAC 92.044. Permit for hunting bear with the use of bait or scent lures.

- (a) A person may not establish a bear bait station to hunt bear with the use of bait or scent lures without first obtaining a permit from the department under this section.

The department currently uses its discretionary authority found in 5 AAC 92.052 to limit where bear baiting is allowed. The department does not currently issue permits for hunting bears with the use of bait or scent lures in Unit 14(C). The Department has discussed all existing closures with the board and intends to address any new closures with the board.

This area is within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? A black bear registration hunt would be established, allowing harvest via muzzleloader or shotgun in the Anchorage Management area using bait from May 1- June 15 in areas designated by the Department. Black bear harvest may increase as a result but will remain within sustainable levels.

BACKGROUND: Currently, there is no black bear hunting in the Anchorage Management Area, and hunters are not allowed to establish bait sites for black bears anywhere in Unit 14(C). Black bear hunting is allowed by registration permit in the Eagle River Management Area (RL450 and RL460), by drawing permit in the JBER Management Area (DL455), and under a general season harvest ticket in the Eklutna Management Area (archery only), the Chugach Management Area and the Remainder of 14(C).

The annual black bear hunter harvest in Unit 14(C) has averaged 39 animals over the last 10 years; however, in some years there are large numbers of bears killed for other reasons, such as those killed in defense of life or property (DLP) or agency kills conducted for public safety reasons (Table 120-1). The department does not have information on the number of black bears in the population; however, there are indications that the population is healthy based on hunter success, observations of animals in the field, and the number of reports received by the Department about nuisance bears.

Table 120-1. Number of black bears killed in Unit 14(C), 2008-2017.

Regulatory Year	Agency Kills	DLPs	Roadkill	Railroad	Hunter Kills	TOTAL
2008	10	8	0	0	65	83
2009	4	8	2	0	41	55
2010	9	8	1	0	45	63
2011	3	7	2	0	49	61
2012	4	7	2	0	43	56
2013	1	4	6	0	26	37
2014	8	11	2	2	31	54
2015	2	9	3	0	24	38
2016	7	7	3	0	33	50
2017	13	15	4	0	35	67

The use of bait for bears is allowed under the conditions of 5 AAC 92.044. The regulation states that bait and scent lures may not be placed within one-quarter mile of a publicly maintained road, trail, or the Alaska Railroad; may not be placed within one mile of a house or permanent dwelling, except that bait may be used within one mile of a cabin if the cabin is on the opposite side of a major river system, as identified by the department in the permit, from the bear baiting station; or within one mile of a business, school, developed campground, or recreational facility.

Additionally, a special use permit will be required from Chugach State Parks if hunting in any forks of Campbell Creek, Rabbit Creek, McHugh Creek, and Rainbow Creek. Under 11 AAC 20.010 Use of Weapons, the discharge of firearms is prohibited in these drainages. Each of these drainages are in the Anchorage Management Area.

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

It may be difficult to locate areas in the Anchorage Management Area that meet the requirements listed in 5 AAC 92.044(5): specifically, distances from roads, trails, and other facilities.

If adopted, the department requests that this be made a drawing rather than a registration hunt, since the number of suitable areas for bait sites are likely to be very limited.

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

PROPOSAL 121– 5 AAC 92.044. Permit for hunting bear with the use of bait or scent lures.

PROPOSED BY: Resident Hunters of Alaska.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to allow the harvest of black bear over bait in the Remainder of Unit 14(C) (outside special management areas) April 15 – June 30. The proposer also asked that the Board of Game consider allowing brown bear baiting April 15 – May 31.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 92.044 (b)(1) allows a person to establish a black bear bait station, or a black and brown bear bait station in Units 7, 11, 12, 13, 14(B), 15, 16, 18, 19(A), 19(D), 20(A), 20(B), 20(C), that portion of 20(D) north of the Tanana River, 20(E), 20(F), 21(C), 21(D), 23, 24(C), 24(D), and 25(D), only if that person obtains a permit.

Unit 14(C) is within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would allow black bears to be harvested over bait from April 15 – June 30 in the Remainder of Unit 14(C).

BACKGROUND: Currently, hunters are not allowed to establish bait sites for black bears, or black and brown bears, in Unit 14(C).

Within the Remainder of Unit 14(C) there is no closed season for the harvest of black bear, with a limit of one bear. Additionally, the take of one brown bear every four regulatory years is allowed within the same area Sept. 1 – May 31.

Over the last 10 years the annual black bear hunter harvest in Unit 14(C) has averaged 39 animals and brown bear hunter harvest has averaged two animals; however, in some years there are large numbers of bears killed for other reasons, such as those killed in defense of life or property (DLP) or agency kills conducted for public safety reasons. Black bear harvest can be found in Table 120-1 and brown bear harvest can be found in Table 121-1. The department does not have information on the number of either black or brown bears in the population; however, there are indications that the populations are healthy based on hunter success, observations of animals in the field, and the number of reports received by the Department about nuisance bears.

Table 121-1. Number of brown bears killed in Unit 14(C), 2008-2017.

Regulatory Year	Agency Kills	DLPs	Roadkill	Railroad	Hunter Kills	TOTAL
2008	1	1	1	2	1	6
2009	0	2	0	0	2	4
2010	0	0	0	0	2	2
2011	2	3	1	0	6	12
2012	1	3	3	0	1	8
2013	1	1	1	0	3	6
2014	1	1	2	0	2	6
2015	1	2	2	0	2	7
2016	1	4	1	0	2	8
2017	7	0	0	0	6	13

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. Access to the Remainder of 14(C) is difficult and mainly by foot, with some limited access by boat or airplane. The Department currently sees no biological concern if the Board were to adopt this proposal.

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

PROPOSAL 126 – 5 AAC 85.045. Hunting seasons and bag limits for moose. Allow additional harvest opportunity in Unit 16A by providing an antlerless hunt and/or an “any bull” hunt.

PROPOSED BY: Board of Game

WHAT WOULD THE PROPOSAL DO? The proposal would create an antlerless moose hunt by draw permit available to residents only. Season dates would be Aug. 20–Sept. 25 and Nov. 1–Last day of February. The proposal would also create an “any bull” draw hunt for residents only with season dates of Aug. 20–Sept 25. and Nov. 1–Dec. 15.

WHAT ARE THE CURRENT REGULATIONS? Under the current regulations resident and non-resident hunters may take one bull moose with spike-fork antlers, or 50-inch antlers, or antlers

with three or more brow tines on at least one side with a bow and arrow only from Aug. 10–Aug. 17; or under general harvest regulations from Aug. 20–Sept. 25.

The population objective for moose in Unit 16A is 3,500–4,000, and the harvest objective is 190–360.

Unit 16A is within the Anchorage-Matsu-Kenai Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The proposal would create additional harvest opportunities in Unit 16A by providing an antlerless draw hunt and/or an “any bull” draw hunt. Additional harvest in the unit should reduce the population in Unit 16A, which is well above the population objective and susceptible to over-browsing the habitat. Heavy snow winters, which are common in the area, could lead to significant die-offs particularly if the landscape has been over-browsed.

BACKGROUND: Before 1940 moose persisted at low densities in Unit 16A. Thereafter, the unit’s moose population experienced large fluctuations in size as a result of die-offs during severe winters. These have occurred at least once every decade. The previous population high was noted in 1997 at 3,636 moose with a low of 1,619 recorded in 2005 (Figure 126-1). Recovery of the moose population after a severe winter can be hampered by many factors, including predation. The population objective is 3,500–4,000.

Unit 16A is mostly a roadless area. Access is limited to a few points from the Parks Highway, Petersville Road, and Oil Well Road. Boats, airboats, all-terrain vehicles, and airplanes are used to access more remote portions of the unit for moose hunting. Annual harvest by hunters has fluctuated due to variable moose densities, availability of cow moose hunts, and improved hunter access. Harvest numbers have ranged from a high of 309 (1984) to a low of 37 (1990) (Figure 126-2). The harvest objective is 190–360, and the harvest averages 157 annually over the past ten years.

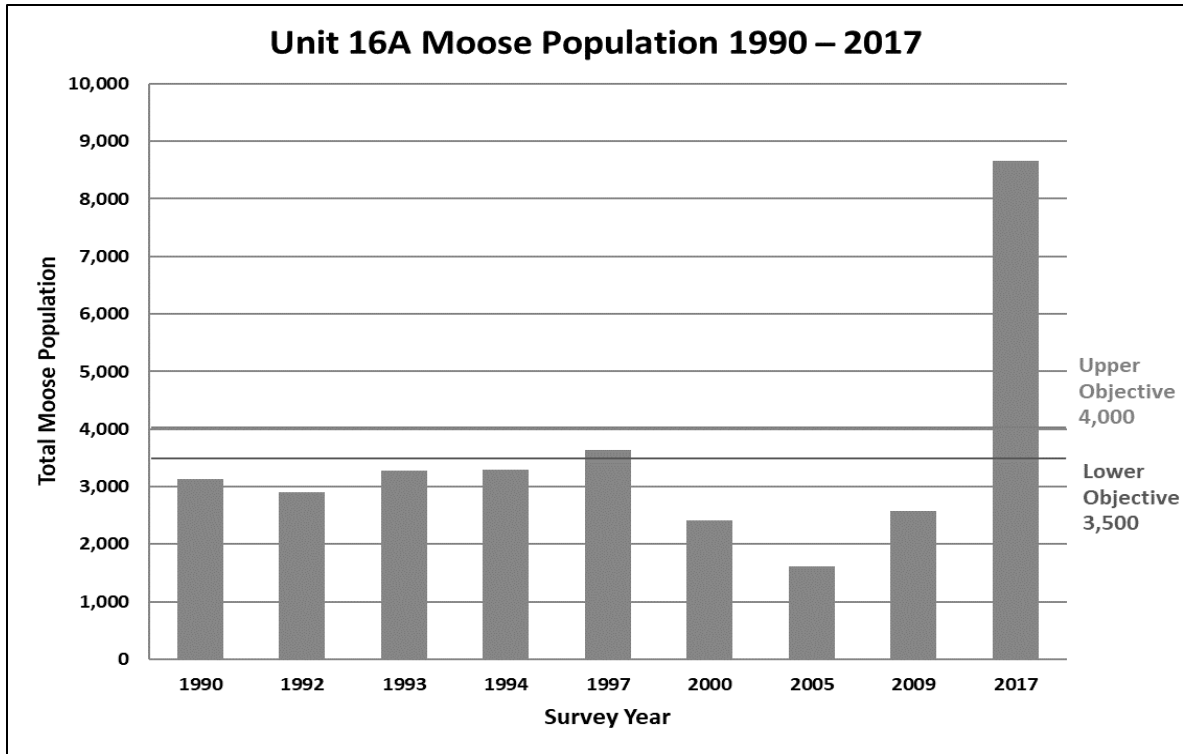


Figure 126-1. Moose abundance in Unit 16A, 1990–2017.

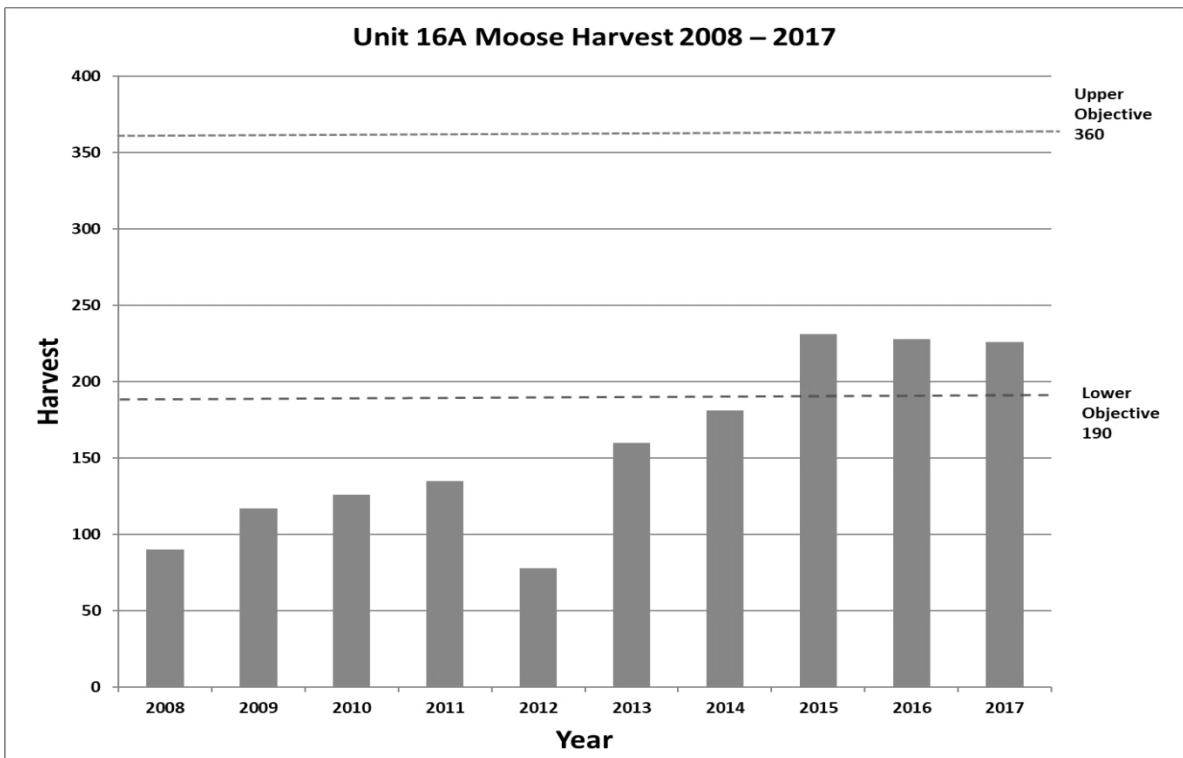


Figure 126-2. Moose harvest in Unit 16A, 2008–2017.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal because there is a biological concern for the moose population in Unit 16A. Persistence of the population at such high levels could result in a substantial die-off should the area experience a heavy snow year, which occur about once or twice every decade. Reducing the population now through a draw hunt(s) would provide additional opportunities for hunters and possibly prevent a die-off event in the future.

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

PROPOSAL 133 5 AAC 85.045 Hunting seasons and bag limits for moose. Reauthorize the antlerless moose seasons in the Remainder of Unit 18.

PROPOSED BY: Alaska Department of Fish and Game

WHAT WOULD THE PROPOSAL DO? This proposal reauthorizes the resident and nonresident antlerless moose season south of and including the Goodnews River drainage and in the remainder of Unit 18.

WHAT ARE THE CURRENT REGULATIONS?

Antlerless hunting during the winter seasons is allowed for resident hunters south of and including the Goodnews River drainage in Unit 18 in a “may be announced” season in the month of January. The season timing and length depend on the winter travel conditions and how many moose are left from the fall quota.

Antlerless hunting during fall and winter seasons is allowed for resident hunters in the “Remainder of Unit 18”. There are three components to antlerless seasons:

- 1) during August 1–September 30 the bag limit is 2 moose; however, only one antlered bull may be taken and taking calves or cows accompanied by calves is prohibited;
- 2) during October 1–November 30 the bag limit is 2 antlerless moose with no additional restrictions; and
- 3) during December 1–March 15 the bag limit is 2 moose with no additional restrictions.

There is a positive C&T finding for moose in Unit 18, and an ANS of 200–400.

Antlerless moose hunting is also allowed for nonresident hunters in Unit 18 remainder. The current season for nonresidents is December 1- March 15 and the bag limit is one antlerless moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The antlerless hunts in the areas south of and including the Goodnews River drainage and the

remainder of Unit 18 would be reauthorized for RY2019. Hunters would have the same seasons and bag limits as RY2018 (see Current Regulations above).

BACKGROUND: Antlerless moose seasons must be reauthorized annually. Both hunt areas support moose populations that have increased to an all-time high level. In Unit 18 remainder, this is now conservatively estimated at 17,000 moose. In the same area, the moose populations have twinning rates at or above 40%.

Harvests by residents in Unit 18 Remainder for RY2017 (n=719) is slightly higher than the previous 3-year average harvest (n=657). In RY2017, the harvest ticket reports from the remainder of Unit 18 included 157 cows taken, along with the harvest of 560 bull moose. The combined harvest for Unit 18 remainder is within sustained yield, and the population trajectory has not been affected by antlerless harvests.

RY2017 was the first year for antlerless hunts for nonresidents in GMU 18 Remainder. No nonresidents reported harvesting moose from Dec. 1 through March 15. We anticipate that participation in this hunt will remain low.

In the Goodnews River drainage there are a minimum of 250 moose. The quota for RY2017 was 30 moose and the total harvest in the area south of and including the Goodnews River drainage was 17 moose. Twelve bull moose were harvested in the fall season and five moose were harvested in the winter, four of which were cows.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal to maintain antlerless hunts in areas where moose populations are increasing. Continuing antlerless moose harvest opportunity will benefit hunters and may also help slow the growth rate of the population.

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

PROPOSAL 146 – 5 AAC 85.045(a)(14). Change the resident seasons and bag limits for moose in Unit 16B.

PROPOSED BY: Susitna Valley Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? Change the bag limit for Tier II moose hunts in Unit 16B to any moose and add a resident antlerless moose draw hunt in Unit 16B.

WHAT ARE THE CURRENT REGULATIONS? The population objective in Unit 16B is 6,500–7,500 moose with a harvest objective of 310–600 moose annually.

Table 146-1. Moose seasons and bag limits in GMU 16B at different levels of harvestable surplus.

Harvestable Surplus	Hunt Type	Season Dates		Legal Moose
		Resident	Non-Resident	
≤199	Tier II (up to 400 permits)	Aug. 20–Sept. 30		Bull with Spike-Fork or 50" and 3 or more Brow tines Bull
		Dec. 15–Mar. 31		
199–240	HT	Sept. 1–Sept. 15		Bull with Spike-Fork or 50" or 3 or more Brow tines Bull
	Tier II (up to 260 permits)	Dec. 15–Mar. 31		
>240	HT	Aug. 20–Sept. 25	Aug. 20–Sept. 25	Bull with Spike-Fork or 50" or 3 or more Brow tines Bull
	Tier II (up to 260 permits)	Dec. 15–Mar. 31		
>310	HT	Aug. 20–Sept. 25	Aug. 20–Sept. 25	Bull with Spike-Fork or 50" or 3 or more Brow tines Bull Bull Bull Bull Bull
	Draw Permit (600 permits)	Aug. 20–Sept. 25		
	Youth draw (25%)	Aug. 20–Sept. 25 & Nov. 15–Jan. 31		
	Draw Permit ^a (500 permits)	Dec. 15–Last Day of Feb.		
	Registration ^a	Dec. 15–Last Day of Feb.		
	Tier II (up to 260 permits)	Dec. 15–Mar. 31		

^aThis hunt has not been implemented.

The Board of Game has made positive customary and traditional use findings for the following moose populations in Unit 16B:

Area	Amount Reasonably Necessary for Subsistence
16B Redoubt Bay drainages	10 moose
16B South of the Beluga River & north of Redoubt Bay	29–37 moose

16B North of the Beluga River	160–180 moose
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WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Increasing harvest in Unit 16B would allow residents more opportunity to harvest available moose and reduce the impact of over browsing the habitat. Harvesting cow moose will likely reduce the severity of any future population decline that might occur and reduce the time to recover to within the population objective following a sudden decline. The number of hunters in the unit would likely increase, which may lead to increased competition with local hunters.

BACKGROUND: Before 1940, moose were uncommon in Unit 16B. After that time, habitat changes and federal predator control allowed the population to increase. Moose populations fluctuate greatly in Unit 16B due to heavy snow years that seem to occur once or twice every decade. A unit-wide estimate of the moose population in Unit 16B was not completed prior to 1985. At that time surveys were conducted in count areas in the alpine and subalpine areas: forested areas were avoided due to sightability limitations. The first Gasaway style moose population surveys were conducted in November of 1990. Based on the results of the 1990 survey, and the estimated population reduction of moose as a result of the severe, deep snow winter of 1989-1990, area staff estimated the 1989 fall population to be 8,500 ± 1,000 moose. This was the highest recorded population estimate prior to the spring 2018 estimate of 10,000 ± 1,700 moose. The population has been within its current objective 15 of the last 27 years (Figure 146-1). The Tier II hunt occurs from December 15—March 31 and allows access to moose that are inaccessible during the fall season but move to lower elevations during winter. Given the potential for periodic severe winter weather to reduce the moose population, and for predators to impede population recovery, higher moose population levels may be untenable.

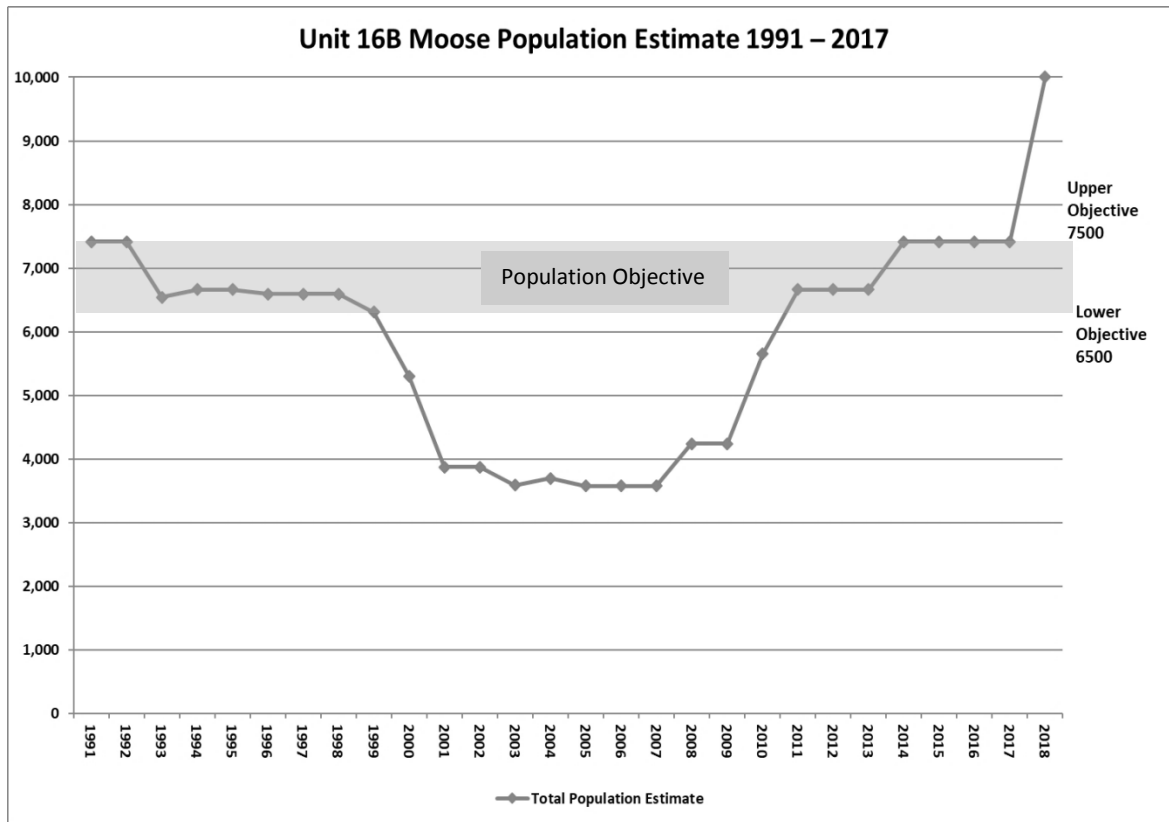


Figure 146-1. Moose abundance in Unit 16B, RY1991–2018.

This moose population was identified for intensive management and recent population growth occurred in conjunction with predation control on bears and wolves. The predation control program began in 2004 with wolf reduction and it successfully reduced the wolf population to within the management objective of between 22 and 45 wolves in Unit 16B and so was suspended in 2014. Black bear control was initiated in 2007 and brown bear control was initiated in 2011. The objective of the black bear control program was to reduce by 60–80% the population of black bears, which was estimated to be $3,500 \pm 300$ in Unit 16B in 2007. The objective of the brown bear control program was to reduce by 60% the population of brown bears, which was estimated at 937 ± 313 in 2007. Moose surveys in the southern and middle portion of the unit in 2018, and the northern portion (Figure 146-2) of the unit in 2014 suggested that the moose population is above the population objective. Due to the increases observed in the moose population, and the ineffectiveness of the bear control programs to meet reduction objectives, managers suspended the bear control programs in 2016.

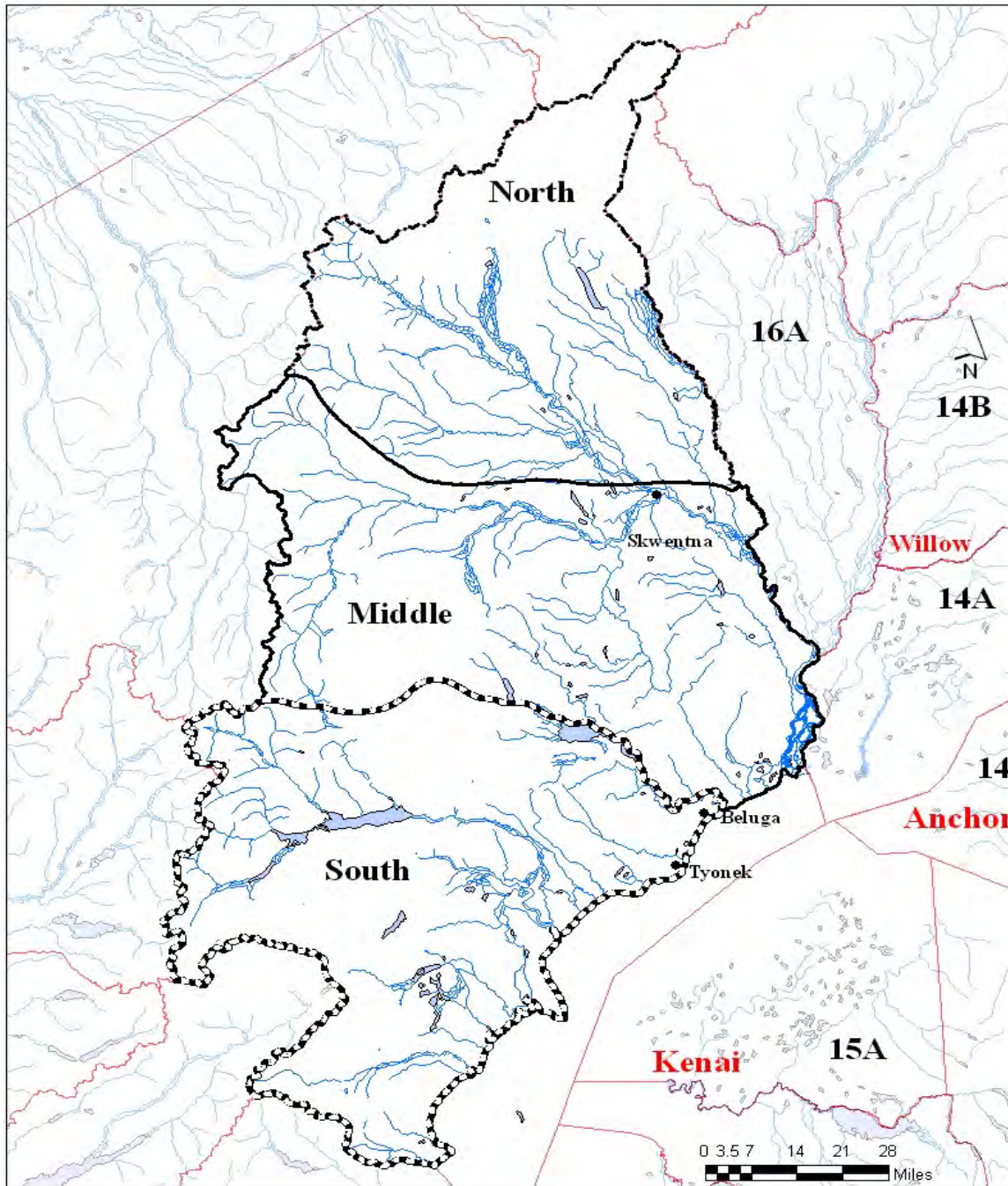


Figure 146-2. Unit 16B is divided into three moose survey areas.

The department has maintained a sample of radio-collared cow moose since the spring of 2005. Calf twinning and recruitment rates have been determined by locating the cows and their offspring throughout calving season and determining survival through fall and over the winter. Twinning rates for the radio-collared cows in the Unit 16B moose population averaged 53% during the study period. Calf recruitment to fall has increased from 8% in 2005 to 30% in 2017 (Figures 146-3 and 146-4).

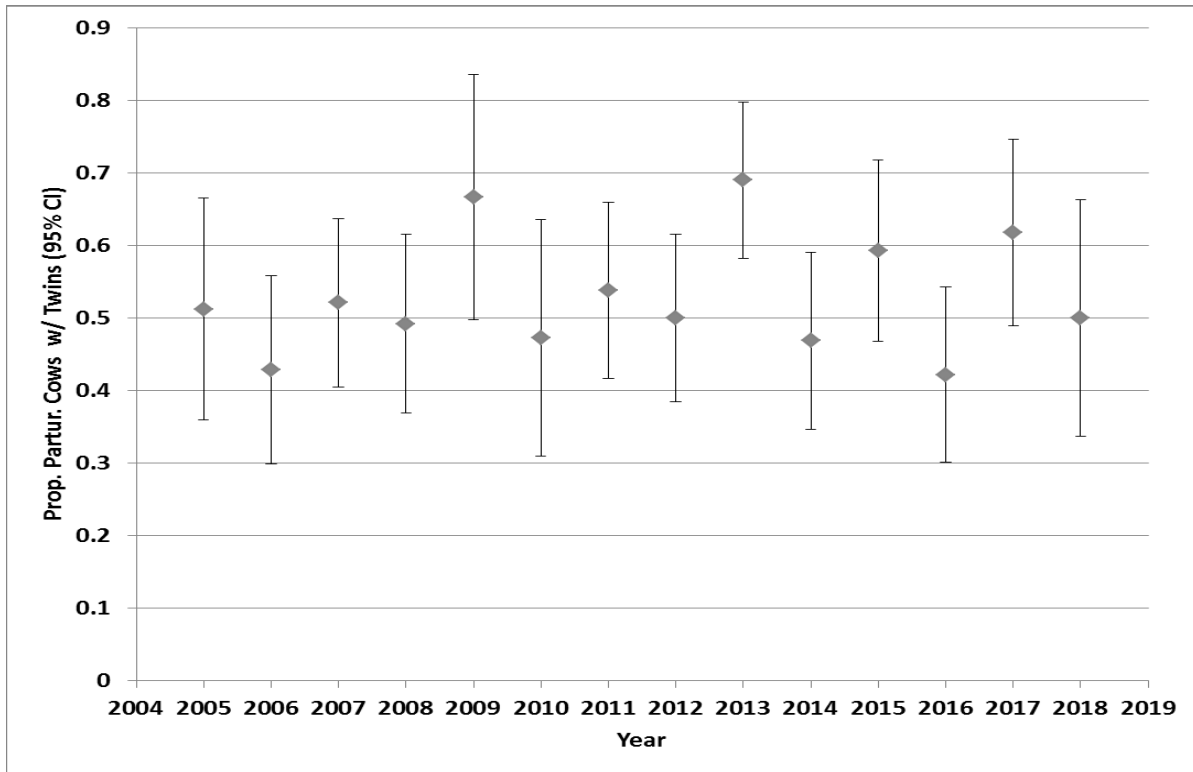


Figure 146-3. Twinning rates of radio-collared cows in Unit 16B, 2005–2018.

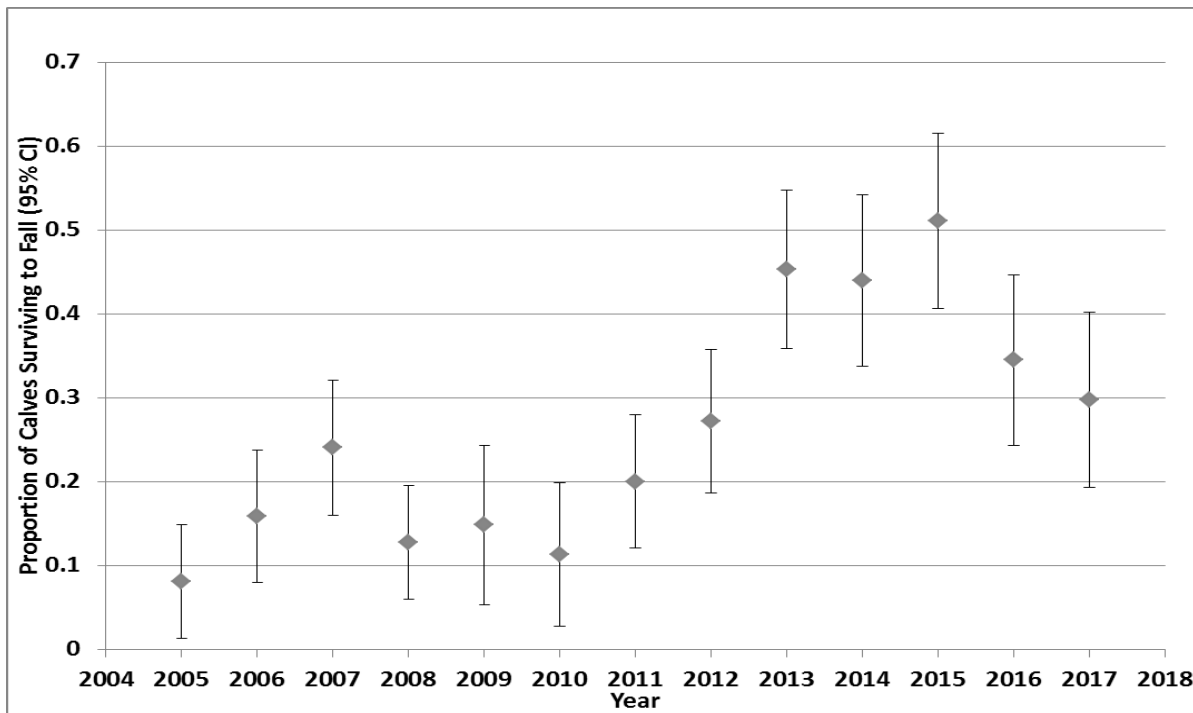


Figure 146-4. Moose calf survival to fall in Unit 16B, 2005–2017.

In the spring of 2017 ADF&G conducted captures of 10-month old females and their weights indicated excellent nutritional condition. Based on the results of the radio-collar study, and the most recent surveys, the population appears to be growing. Although nutritional indices are currently good there is typically a lag between the reduction in measured browse and the response in the population. Habitat limitations may not support sustained higher population levels, but at this time we do not have an estimate of what population level the landscape can support. Anticipated browse and habitat surveys will evaluate habitat quality and quantity and may be available for the next Central/Southwest Board of Game meeting (2020/2021). Historical evidence demonstrates that the area is subject to severe weather on a decadal basis and the impacts of severe winters may be exacerbated at high population levels.

Moose harvest has been steadily increasing since regulatory year 2012 (Figure 146-5) and has been within the objective (310–600) since 2015. The department sought to address the high bull to cow ratios by increasing the number of drawing permits available for the fall hunt. The Board of Game approved a winter registration and a winter draw hunt with an ‘any bull’ bag limit in the spring of 2016. However, there were concerns expressed by the local communities that mid-winter bull hunts may stress cows as hunters search for a legal animal. The moose population itself was not deemed to be over the objective until surveys were completed in the spring of 2018. Additional bull permits would not address the reproductive segment of the population and would not be sufficient to bring the population back to the objective.

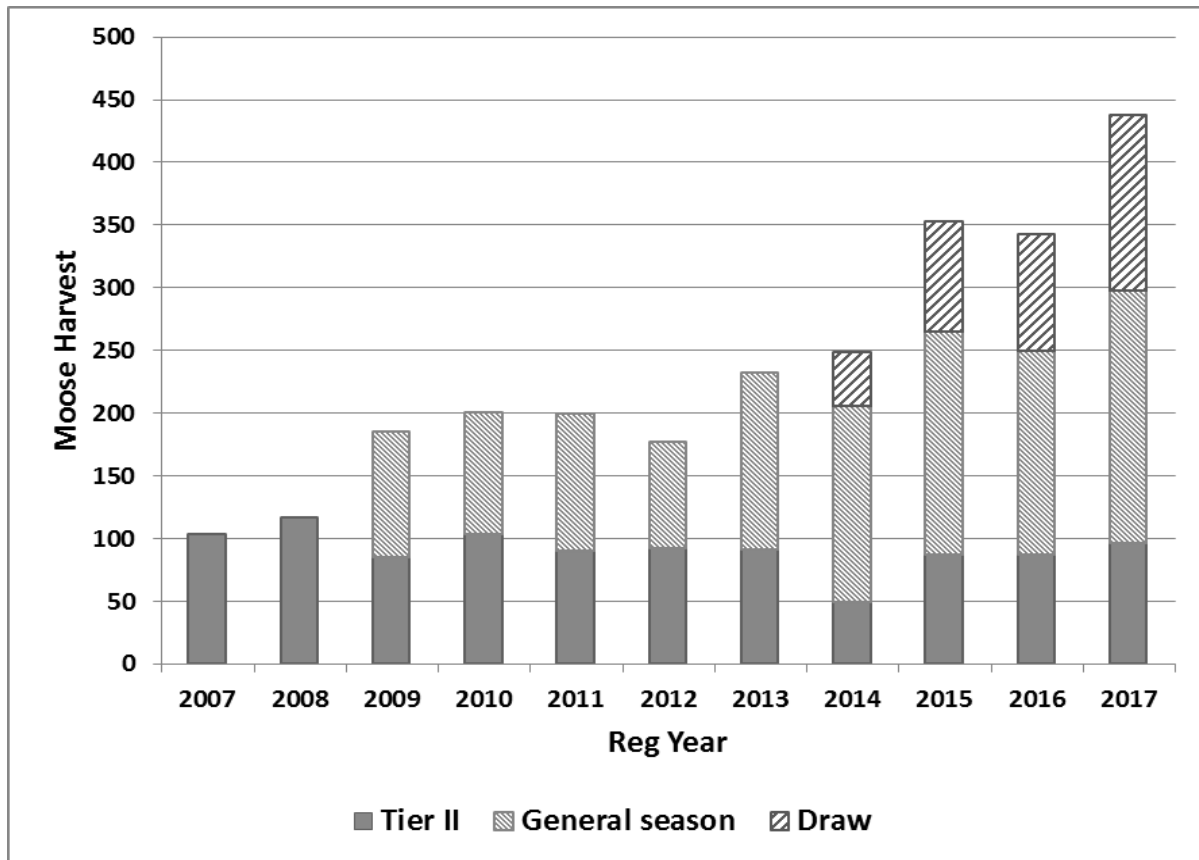


Figure 146-5. Annual moose harvest in Unit 16B by hunt type, 2007–2017.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal because there is a biological concern for the moose population in Unit 16B. Persistence of the population at such high levels could result in a significant die-off should the area experience a heavy snow winter as has occurred historically about once every decade. Reducing the population now through a draw hunt would provide additional opportunity for hunters and possibly prevent or reduce the severity of a future die-off event.

An alternative, which could be implemented along with or separate from the changes advocated in this proposal, is to increase the number of available Tier II permits. For the four regulatory years 2014/15 through 2017/18, a total of 260 Tier II permits in three hunts have been available annually, and the average number of applicants has been 638, a successful draw rate of about 41%. An increase in the number of available Tier II permits would likely result in more hunters in the field during the winter season and a higher harvest.

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

PROPOSAL 147 – 5 AAC 85.020. Hunting seasons and bag limits for brown bear.

PROPOSED BY: Lake Iliamna Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? Change the brown bear season back to September 20–October 21 (odd years) and May 10–31 (even years) in Unit 9B for residents and nonresidents.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 85.020(a)(8)

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
(8)		
Unit 9(A) 1 bear every 4 regulatory years by registration permit only	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)
Unit 9(B) 1 bear every 4 regulatory years by registration permit only	Sept. 1–May 31 (Subsistence hunt only)	No open season.
1 bear every 4 regulatory years by registration permit only	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)
1 bear every regulatory year by registration permit only within 5 miles of the communities of Port Alsworth, Nondalton, Iliamna, Newhalen, Pile Bay, Pedro Bay, Pope Vanoy Landing, Kakhonak, Igiugig, and Levelock	July 1–June 30	No open season.
Unit 9C	<u>Oct. 7–Oct. 21</u>	<u>Oct. 7–Oct. 21</u>

1 bear every 4 regulatory years by registration permit only	(Odd years only) <u>May 10–May 25</u> (Even years only)	(Odd years only) <u>May 10–May 25</u> (Even years only)
1 bear every regulatory year by registration permit only within 5 miles of the communities of King Salmon, Naknek, and South Naknek	July 1–June 30	No open season.
Unit 9D		
1 bear every 4 regulatory years by registration permit only	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)
1 bear every regulatory year by registration permit only within 5 miles of the communities of Cold Bay, King Cove, Sand Point, and Nelson Lagoon	July 1–June 30	No open season.
Unit 9(E), that portion including all drainages into the Pacific Ocean between Cape Kumliun and the border of Units 9(E) and 9(D)		
1 bear every regulatory year by registration permit only	Nov. 1–Dec. 31 (Subsistence hunt only)	No open season.
1 bear every 4 regulatory years by registration permit only	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)	<u>Oct. 7–Oct. 21</u> (Odd years only) <u>May 10–May 25</u> (Even years only)
1 bear every regulatory year by registration permit only within 5 miles of the communities of Chignik Lake, Chignik Lagoon, Chignik Bay, Perryville, and Ivanof Bay	July 1–June 30	No open season.
Remainder of Unit 9(E)	<u>Oct. 7–Oct. 21</u> (Odd years only)	<u>Oct. 7–Oct. 21</u> (Odd years only)

1 bear every 4 regulatory years by registration permit only	<u>May 10–May 25</u> (Even years only)	<u>May 10–May 25</u> (Even years only)
1 bear every regulatory year by registration permit only within 5 miles of the communities of Egegik, Pilot Point, Ugashik, Port Heiden, and Port Moller	July 1–June 30	No open season.

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? This would return the fall season to September 20–October 21 (odd years) which had been in effect since 1999 in Unit 9B, in recognition that bears tend to den earlier there than the rest of Unit 9 (which has a more maritime climate). During the last two open fall hunts in Unit 9B, 16 and 15 bears were harvested in September, versus five and four taken during the first week of October.

This proposal would also return six days to the spring season (May 10–31). During the last two open spring hunts, only one and two bears were harvested.

BACKGROUND: Management objectives for brown bears in Unit 9 are to maintain a high density with a sex and age structure that will sustain a harvest composed of 60% males, with 50 males eight years of age (yoa) or older (considered trophy bears) taken each biennial season. These objectives have been exceeded every season since 1982. Last year, however, an extensive analysis of harvest data and other information revealed population-level concerns in Units 9E and 9D, and to a lesser degree in Units 9A and 9C, prompting the Board to reduce season lengths in Unit 9. The department’s intent was to recommend season reductions for the southern portion of the Alaska Peninsula. Changes to Unit 9B were not deemed necessary because harvest is low and population-level effects observed in areas of high harvest density, such as Units 9D and 9E, were not present in Unit 9B statistics. Registration hunts held from 2011 to 2017 resulted in hunter success in Unit 9B of 53% on average (47–57% range). During the same period the number of hunters declined from 121 to 72, resulting in a declining bear harvest from 70 to 36. Unlike the rest of Unit 9, there was no recent increase in age structure of the harvest, nor in the proportion of trophy-aged males. The proportion of sexually mature females (>4 yoa) in the harvest increased slightly (11%).

Unit 9B is less isolated than the other subunits and shares a very long boundary with Unit 17, where the bag limit is two bears per year.

Season lengths of October 7–21 and May 10–25 were utilized during 1973–1983 and 1991–1997 when overharvest became a concern. Traditionally Unit 9A has had the same season dates as Units 9C, D and E. The huntable portion of Unit 9A (outside of national park and McNeil Sanctuary lands) is coastal habitat highly accessible to boat-based hunters, who are primarily from the Kenai Peninsula. The number of hunters increased in Unit 9A from 64 in 2011 to 111 in 2017, while hunter success declined slightly from 63 to 57%, and harvest increased from 40 to 63. The age structure of the harvest in Unit 9A showed a recent increase in the proportions of trophy aged males and sexually mature females.

Season lengths for biennial hunts were reduced by the Board in March 2018 along with the rest of Unit 9. Regulations in Unit 9B are one brown bear every four regulatory years, October 7–21 and May 10–25. Biennial seasons are open every other year during fall of odd years and spring of even years and have been in effect since 1976 to manage bear harvest. Residents and nonresidents have the same seasons and bag limits for RB369 (fall) and RB370 (spring). Hides and skulls must be salvaged in hunts and presented to the department for measuring and sealing.

Residents may also hunt bears near towns and villages of Unit 9B with a RB525 (subsistence) permit with no closed season and a one bear per year bag limit that does not count towards the “one bear every four regulatory years” bag limit. Meat must be salvaged for human consumption. Sealing is only required if the hide or skull is removed from the unit.

Alignment of spring season dates to reduce complexity of the regulations is a consideration. Historically, all five subunits in Unit 9 have had the same spring season dates under one registration hunt. For fall hunts, Unit 9B hunting is held under RB369 while Units 9A, C, D, and E are under RB368. Further divisions of season dates may not be desirable given the low harvest during the last six days in Unit 9B (three bears in two seasons).

DEPARTMENT COMMENTS: The department **SUPPORTS** the fall season change in Unit 9B because there is little concern for the overharvest of brown bears. The department is **NEUTRAL** on the additional six days in spring season; having the same closing date unit-wide probably out-weighs the observed low harvest.

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

PROPOSAL 148 – 5 AAC 85.020. Hunting seasons and bag limits for brown bear.

PROPOSED BY: Casey Foster, Chester Williams, Jim Tilly, Marlene Tilly, and Jessica Williams.

WHAT WOULD THE PROPOSAL DO? Change the brown bear season back to September 20–October 21 (odd years). *(This staff comment is the same as for Proposal 147 except that comments on the spring hunt season have been removed.)*

WHAT ARE THE CURRENT REGULATIONS? See Proposal 147.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The proposal would return the early extension back to the fall season which had been in effect since 1999 in Unit 9B, recognizing that bears tend to den earlier there than the rest of Unit 9 (which has a more maritime climate). During the last two open fall hunts in Unit 9B, 16 and 15 bears were harvested in September, versus five and four taken during the first week of October.

BACKGROUND: Management objectives for brown bears in Unit 9 are to maintain a high density with a sex and age structure that will sustain a harvest composed of 60% males, with 50 males eight years of age (yoa) or older (considered trophy bears) taken each biennial season. These objectives have been exceeded every season since 1982. Last year, however, an extensive analysis of harvest data and other information revealed population-level concerns in Units 9E and 9D, and to a lesser degree in Units 9A and 9C, prompting the Board to reduce season lengths in Unit 9. The department's intent was to recommend season reductions for the southern portion of the Alaska Peninsula. Changes to Unit 9B were not deemed necessary because harvest is low and population-level effects observed in areas of high harvest density, such as Units 9D and 9E, were not present in Unit 9B statistics. Registration hunts held from 2011 to 2017 resulted in hunter success in Unit 9B of 53% on average (47 – 57% range). During the same period the number of hunters declined from 121 to 72, resulting in a declining bear harvest from 70 to 36. Unlike the rest of Unit 9, there was no recent increase in age structure of the harvest, nor in the proportion of trophy-aged males. The proportion of sexually mature females (>4 YOA) in the harvest increased slightly (11%).

Unit 9B is less isolated than the other subunits and shares a very long boundary with Unit 17, where the bag limit is two bears per year.

Season lengths of October 7–21 and May 10–25 were utilized during 1973–1983 and 1991–1997 when overharvest became a concern. Traditionally Unit 9A has had the same season dates as Units 9C, D and E. The huntable portion of Unit 9A (outside of national park and McNeil Sanctuary lands) is coastal habitat highly accessible to boat-based hunters, who are primarily from the Kenai Peninsula. The number of hunters increased in Unit 9A from 64 in 2011 to 111 in 2017, while hunter success declined slightly from 63 to 57%, and harvest increased from 40 to 63. The age structure of the harvest in Unit 9A showed a recent increase in the proportions of trophy aged males and sexually mature females.

Season lengths for biennial hunts were reduced by the Board in March 2018 along with the rest of Unit 9. Regulations in Unit 9B are one brown bear every four regulatory years, October 7–21 and May 10–25. Biennial seasons are open every other year during fall of odd years and spring

of even years and have been in effect since 1976 to manage bear harvest. Residents and nonresidents have the same seasons and bag limits for RB369 (fall), and RB370 (spring). Hides and skulls must be salvaged in hunts and presented to the department for measuring and sealing.

Residents may also hunt bears near towns and villages of Unit 9B with a RB525 permit (subsistence) permit with no closed season and a one bear per year bag limit that does not count towards the “one bear every four regulatory years” bag limit. Meat must be salvaged for human consumption. Sealing is only required if the hide or skull is removed from the unit. Alignment of spring season dates to reduce complexity of the regulations is a consideration. Historically, all 5 subunits in Unit 9 have had the same spring season dates under one registration hunt. For fall hunts, Unit 9B hunting is held under RB369 while Units 9A, C, D, and E are under RB368. Further divisions of season dates may not be desirable given the low harvest during the last six days in Unit 9B (three bears in two seasons).

DEPARTMENT COMMENTS: The department **SUPPORTS** the fall season change because there is little concern for the overharvest brown bears in Unit 9B.

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