Regional and Multiple Units

Note: The following proposals were submitted to the Board of Game as Agenda Change Requests which were accepted during the August 7, 2015 board meeting.

PROPOSAL 132 - 5 AAC 85.070(5). Hunting season and bag limits for unclassified game.
Modify the hunting season for snowy owls as follows:

5 AAC 85.070(5) Snowy Owl

Units 17, 18, 22, 23, and 26  Residents: September 1–April 1
                             Nonresidents: No open season

No limit; however, a bird may be taken only if used for food or clothing, and no bird or part of a bird may be sold or offered for sale.

What is the issue you would like the board to address and why? The Department of Fish and Game has determined that it is no longer legal, under Federal Regulations 50 CFR part 20.132, to allow for the harvest of snowy owl on a “no closed season” basis. Following amendments to the Migratory Bird Treaty Act in 1997, a regulated spring/summer subsistence season for the harvest of migratory birds was established in 2003 in portions of rural Alaska. From April 2 to August 31 federal regulations allowed the harvest of cormorants to only permanent residents of areas included in the spring/summer subsistence harvest. This is an update to state of Alaska regulations so they comply with federal regulations enacted in 2003.

PROPOSED BY: Alaska Department of Fish and Game (ACR-C15-08)
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PROPOSAL 133 - 5 AAC 85.070(3). Hunting season and bag limits for unclassified game.
Modify the hunting season for cormorants as follows:

85.070(3) Cormorants (Pelagic and Double-crested cormorants only)

Units 6, 8, 10, 17, 18, 22, 23  Residents: September 1–April 1
                               Nonresidents: No open season

No limit; however, a bird may be taken only if used for food or clothing, and no bird or part of a bird may be sold or offered for sale.

What is the issue you would like the board to address and why? The Department of Fish and Game has determined that it is no longer legal, under Federal Regulations 50 CFR part 20.132, to allow for the harvest of cormorants on a “no closed season” basis. Following amendments to the Migratory Bird Treaty Act in 1997, a regulated spring/summer subsistence season for the harvest of migratory birds was established in 2003 in portions of rural Alaska. From April 2 to August 31 federal regulations allowed the harvest of cormorants to only permanent residents of areas
included in the spring/summer subsistence harvest. This is an update to state of Alaska regulations so they comply with federal regulations enacted in 2003.

PROPOSED BY: Alaska Department of Fish and Game (ACR-C15-09)

PROPOSAL 134 - 5 AAC 85.025(15). Hunting seasons and bag limits for caribou. Increase the bag limits for Mulchatna caribou in Units 17, 18, 19A & 19B, and 9A & 9C as follows:

Liberalize the bag limit for Mulchatna caribou to two caribou from August 1–March 31 in Units 17 and 9B and August 1–March 15 in Units 18, 19A&B, and 9A&C.

<table>
<thead>
<tr>
<th>Units and Bag Limits</th>
<th>Resident Open Season (Subsistence and General Hunts)</th>
<th>Nonresident Open Season</th>
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</thead>
<tbody>
<tr>
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</table>

Unit 9(A) and that portion of Unit 9(C) within the Alagnak River drainage

**RESIDENT HUNTERS:**
2 caribou by registration permit; **[HOWEVER, NO MORE THAN 1 BULL MAY BE TAKEN AND NO MORE THAN 1 CARIBOU MAY BE TAKEN FROM AUG. 1 - JAN. 31]**

**NONRESIDENT HUNTERS:**
No open season.

Unit 9(B)

**RESIDENT HUNTERS:**
2 caribou by registration permit; **[HOWEVER, NO MORE THAN 1 BULL MAY BE TAKEN AND NO MORE THAN 1 CARIBOU MAY BE TAKEN FROM AUG. 1 - JAN. 31]**

**NONRESIDENT HUNTERS:**
No open season.

• • •
Unit 17(A), all drainages that terminate east of Right Hand Point

RESIDENT HUNTERS:
2 caribou may be taken during the season to be announced by emergency order by registration permit only

(Season to be announced)

NONRESIDENT HUNTERS:
No open season.

Remainder of Unit 17(A)

RESIDENT HUNTERS: Aug. 1—Mar. 31
2 caribou by registration permit only; [HOWEVER, NO MORE THAN 1 BULL MAY BE TAKEN AND NO MORE THAN 1 CARIBOU MAY BE TAKEN FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS:
No open season.

Unit 17(B), that portion in the Unit 17(B) Nonresident Closed Area

RESIDENT HUNTERS: Aug. 1—Mar. 31
2 caribou by registration permit only; [HOWEVER, NO MORE THAN 1 BULL MAY BE TAKEN AND NO MORE THAN 1 CARIBOU MAY BE TAKEN FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS:
No open season.

Remainder of Unit 17(B), and that portion of Unit 17(C) east of the east banks of the Wood River,
Lake Aleknagik, Agulowak River, Lake Nerka, and the Agulukpak River

RESIDENT HUNTERS:
2 caribou by registration permit only; [HOWEVER, NO MORE THAN 1 BULL MAY BE TAKEN AND NO MORE THAN 1 CARIBOU MAY BE TAKEN FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS: No open season.

Remainder of Unit 17(C)

RESIDENT HUNTERS: (Season to be announced)
2 caribou may be taken during the season to be announced by emergency order by registration permit only

NONRESIDENT HUNTERS: No open season.

(13)

Unit 18

RESIDENT HUNTERS: Aug. 1—Mar. 15
2 caribou by registration permit only; [HOWEVER, NO MORE THAN 1 BULL MAY BE TAKEN AND NO MORE THAN 1 CARIBOU MAY BE TAKEN FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS: No open season.

(14)

Unit 19(A), that portion within the Lime Village Management Area

RESIDENT HUNTERS:
2 caribou by registration Aug. 1—Mar. 15
permit only; [HOWEVER, NO
MORE THAN 1 BULL MAY BE
TAKEN AND NO MORE THAN 1
CARIBOU MAY BE TAKEN
FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS: No open season.
Units 19(A) and 19(B) within
the Nonresident Closed Area

RESIDENT HUNTERS:
2 caribou by registration Aug. 1—Mar. 15
permit only; [HOWEVER, NO
MORE THAN 1 BULL MAY BE
TAKEN AND NO MORE THAN 1
CARIBOU MAY BE TAKEN
FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS: No open season.
Remainder of Units 19(A) and
19(B)

RESIDENT HUNTERS:
2 caribou by registration Aug. 1—Mar. 15
permit only; [HOWEVER, NO
MORE THAN 1 BULL MAY BE
TAKEN AND NO MORE THAN 1
CARIBOU MAY BE TAKEN
FROM AUG. 1 - JAN. 31]

NONRESIDENT HUNTERS: No open season.

What is the issue you would like the board to address and why? The Mulchatna caribou herd
ranges across game management Units 17A, B, and C, 18, 19A and B, and 9A, B, and C. During
the mid-1990s this Mulchatna herd reached a peak population size of 200,000 caribou and had a
bag limit of five caribou per year. However, since that time, the herd has declined and is now
estimated to contain approximately 26,000 animals. During the decline, hunting restrictions were
progressively implemented through a hunting closure for nonresidents and reduced seasons and
bag limits for resident hunters.

The current resident-only season is open from August 1–March 31 in Units 17 and 19B, and
from August 1–March 15 in the remainder of the hunt area (Units 18, 19A and B, and 9A and C).
The bag limit is two caribou; however, only one can be a bull, and only one can be harvested from August 1–January 31.

The current bag limit, which was designed to limit bull harvests, was established in 2007 at a time when the bull:cow ratio estimates were consistently below the management objective. However, the restrictions are no longer necessary. During the fall 2014 composition surveys the Mulchatna herd achieved the objective of 35 bulls:100 cows, suggesting that we no longer need to limit hunters to a single bull caribou. Additionally the reported caribou harvest is well below what we consider sustainable for this herd while allowing herd growth. It is no longer necessary to limit hunters to a single bull or restrict the bag limit to a single caribou from August 10–January 31.

Changing the bag limit to allow hunters to take two caribou of either sex and removing the restriction that only allows the harvest of 1 caribou prior to January 31 will simplify the caribou regulations. The bag limit increase is also thought to be sustainable based on the most current information about the Mulchatna herd.

During the August 2015 Board of Game teleconference to discuss Agenda Change Requests, the discussion of Mulchatna herd hunting opportunities included nonresident hunting opportunity. The board has determined there are subsistence uses of the herd, and has found the amount reasonably necessary for subsistence uses is 2,100–2,400 caribou.

**PROPOSED BY:** Alaska Department of Fish and Game (ACR-C15-10)

PROPOSAL 135 - 5 AAC 85.020(a)(20). Hunting seasons and bag limits for brown bear.

Increase the number of nonresident drawing permits for brown bear in the Remainder of Unit 22 as follows:

The affected nonresident hunt is DB690 covering the combination of Units 22D and 22E.

<table>
<thead>
<tr>
<th>Units and Bag Limits</th>
<th>Resident Open Season (Subsistence and General Hunts)</th>
<th>Nonresident Open Season</th>
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</table>

Remainder of Unit 22

RESIDENT HUNTERS:
1 bear every regulatory year by registration permit only
Aug. 1—May 31 (Subsistence hunt only)
1 bear every regulatory year Aug. 1—May 31

NONRESIDENT HUNTERS:
1 bear every regulatory year by drawing permit only; up to 21 [12] permits may be issued Aug. 1—May 31

What is the issue you would like the board to address and why? Increase the number of nonresident drawing permits in the Remainder of Unit 22 where drawing permit hunt DB690 is fully subscribed and additional harvest of brown bears is sustainable. The nonresident hunt in Remainder of Unit 22 is currently managed by issuing 12 permits with a bag limit of one bear every regulatory year during a continuous season from August 1 to May 31 in the combined hunt area of Units 22D and 22E. This proposal changes the number of nonresident permits to 21, an increase of nine permits or an additional 75% above the current number of permits.

The average annual reported bear harvest in Units 22D and 22E by residents and nonresidents is 20 bears per year (range 12–26). Residents harvested 75% of the bears (n=259) and nonresidents harvested 25% of the bears (n=88). The average annual nonresident harvest of brown bears by drawing permit DB690 permit from RY1998 to RY2014 was five bears per year (range 2–8). The DB690 drawing brown bear permit hunt has been fully subscribed since RY2010, and increasing the number of DB690 permits will allow additional opportunity to hunt brown bears.

Since 1997 the Board of Game has incrementally liberalized Unit 22 brown bear regulations through increased bag limits, lengthened seasons, and elimination of the resident tag fee. The liberalized Unit 22 brown bear regulations produced a 74% increase in brown bear harvest. Between RY1990–RY1997 the average annual Unit 22 reported harvest was 54 bears, and between RY1998–RY2014 the average annual Unit 22 reported harvest was 94 bears.

Similar changes were observed in Unit 22D where harvest increased 89%. Between RY1990–RY1997 the average annual reported harvest was 9 bears, and between RY1998–RY2014 the average annual reported harvest was 17 bears. In Unit 22E the average annual harvest increased 67% as a result of liberalized regulations. Between RY1990–RY1997 the average annual reported harvest was 3 bears, and between RY1998–RY2014 the average annual reported harvest was 5 bears.

The department does not have a population estimate of brown bears in Unit 22. However, during this period of liberalized harvests, the reported harvest in Units 22D and 22E remained consistent with the management goal of maintaining a 3-year mean annual reported harvest of at least 50% boars. Sealing records of bears harvested in Units 22D and 22E indicate 56% (n=42 boars) and 77% (n=17 boars) of bears taken between RY1990 and RY1997 were boars, respectively; and 62% (n=178 boars) and 78% (n=65 boars) of bears taken between RY1998 and RY2014 were boars, respectively. Based on the above indices the department believes the brown bear population in Units 22D and 22E can support additional sustainable harvest through an increase in the number of nonresident drawing permits.

PROPOSED BY: Alaska Department of Fish and Game (ACR-C15-11)
**PROPOSAL 136 - 5 AAC 85.045(a)(14). Hunting seasons and bag limits for moose.** Establish winter draw and registration hunts for moose in Unit 16B as follows:

Establish winter draw and registration hunts for one bull moose in Unit 16B to supplement the existing hunt structure when the harvestable portion of the moose population is greater than 240 moose.

<table>
<thead>
<tr>
<th>Units and Bag Limits</th>
<th>Resident Open Season (Subsistence and General Hunts)</th>
<th>Nonresident Open Season</th>
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<tr>
<td>Remainder of Unit 16(B)</td>
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<td>1 bull per regulatory year, only as follows:</td>
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<tr>
<td><strong>RESIDENT HUNTERS</strong></td>
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<tr>
<td>If the harvestable portion is greater than 240 moose:</td>
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<tr>
<td>1 bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side; or</td>
<td>Aug. 20—Sept. 20</td>
<td></td>
</tr>
<tr>
<td>1 bull by drawing permit only; up to 75 percent of the combined drawing permits in the area may be issued to non-youth hunters; up to 300 permits may be issued; provided that the harvestable portion is greater than 310 moose; or</td>
<td>Aug. 20—Sept. 20 (general hunt only)</td>
<td></td>
</tr>
<tr>
<td>1 bull by drawing permit only; up to 25 percent of the combined drawing permits in the area may be issued to youth hunters; up to 100 permits; or</td>
<td>Aug. 20—Sept. 20</td>
<td>Nov. 15—Dec. 15 (general hunt only)</td>
</tr>
</tbody>
</table>
may be issued; provided that the harvestable portion is greater than 310 moose; or

| 1 bull by registration permit only; or | Dec. 15—Last Day of February |
| 1 bull by drawing permit only; up to 500 permits may be issued; or | Dec. 15—Last Day of February |
| 1 bull by Tier II subsistence hunting permit only; up to 260 permits may be issued | Dec. 15—Mar. 31 (Subsistence hunt only) |

What is the issue you would like the board to address and why? This proposal liberalizes winter moose hunting opportunity in Unit 16B to provide additional harvest opportunities for resident hunters. The proposal recommends using a combination of registration and drawing permit hunts to distribute hunting pressure for bulls throughout the unit.

The majority of the new hunting opportunity would be offered through an open registration hunt. Drawing permit hunts would only be offered in areas where the harvest could not be regulated using an open registration permit hunt due to the amount of participation and interest. Additionally, the board may also want to consider increasing the number of Tier II permits that may be issued to increase harvest opportunity or establishing an antlerless moose hunt in portions of the unit where the moose population exceeds management objectives.

The moose population in the unit has increased slowly as a result of intensive management activities and restricted harvest opportunities. The population is currently estimated to contain 7,400 moose, which is above the mid-point of the population objective (7,000 moose), and the department estimates that there is a surplus of approximately 600–700 bulls unit-wide. However, moose harvests remain below the intensive management objectives, despite liberalizations in fall hunting opportunity that have occurred since 2009. Between 2009 and 2013 hunters harvested an average of 199 moose compared to the mainland harvest objective of 310–600. The amount reasonably necessary for subsistence in Unit 16B north of the Beluga River of 160–180 moose (hunts TM565 and TM567). The amount reasonably necessary for subsistence in 16B south of the Beluga River and north of Redoubt Bay is 29–37 (hunt TM569).
Table. Population size and composition of the moose population in Unit 16B relative to management objectives based on the most recent survey results.

<table>
<thead>
<tr>
<th>Survey Unit</th>
<th>IM Population Objective proportional to area (midpoint)</th>
<th>Moose Population Estimate</th>
<th>Percent Recovery to Objective</th>
<th>Bull:100 Cow Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>16(B)-North</td>
<td>1,820–2,100 (1,960)</td>
<td>1,587</td>
<td>81%</td>
<td>60</td>
</tr>
<tr>
<td>16(B)-Middle</td>
<td>3,120–3,600 (3,360)</td>
<td>3,458</td>
<td>103%</td>
<td>46</td>
</tr>
<tr>
<td>16(B)-South</td>
<td>1,560–1,800 (1,680)</td>
<td>2,372</td>
<td>141%</td>
<td>52</td>
</tr>
<tr>
<td>Unit 16(B)</td>
<td>6,500–7,500 (7,000)</td>
<td>7,418</td>
<td>106%</td>
<td></td>
</tr>
</tbody>
</table>

Two new draw hunt opportunities (DM540 & YM541) were implemented in 2014 to provide additional hunting opportunity and increase moose harvests. While these hunts appear to be increasing the total harvest for the unit (234 moose harvested in 2014), the drawing permit requirement places a restriction on who has the ability to participate in these hunts, and some drawing permits issued are not utilized. During 2014, only 27% of the drawing permits issued were used by hunters.

To meet the mid-point of the harvest objective, hunters will need to harvest an additional 120–150 moose each year. This amount of additional harvest is sustainable if the harvest is distributed among all segments of the moose population in Unit 16B. While the liberalization of the existing general season and drawing permit hunts could be used to increase harvest, liberalizing fall hunting opportunities will not distribute the harvest to segments of the moose population that reside in relatively inaccessible areas, which is necessary to achieve the harvest and keep it within sustainable limits. During winters with normal amounts of snow accumulation, segments of the moose population migrate from higher elevation terrain and become more accessible to hunters. This movement, combined with the ability of hunters to use snowmachines to access hunt areas, makes a winter hunt the best option for achieving the harvest objective in Unit 16B.

The additional winter hunting opportunity proposed will allow the harvest to reach the harvest objective, and the permit requirements will allow managers to monitor and distribute the harvest. Stable weather patterns in winter provide hunters access to subpopulations of seasonally-migratory moose that may not be available during the fall hunting season. Because the distribution of moose and comparatively restrictive access limit fall harvests, the department believes that liberalized winter hunting opportunities are needed to achieve the harvest objective.

PROPOSED BY: Alaska Department of Fish and Game (ACR-C15-12)
PROPOSAL 137 - 5 AAC 92.108. Identified big game prey populations and objectives. Modify the Intensive Management population and harvest objectives for moose in Unit 20A as follows:

This proposal would set the population and harvest objectives at levels that population and harvest parameters suggest are more in line with the carrying capacity of the habitat and sustainable harvest over the long term.

<table>
<thead>
<tr>
<th>Population</th>
<th>Finding</th>
<th>Population Objective</th>
<th>Harvest Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moose</td>
<td>Positive</td>
<td>10,000–12,000 [12,000–15,000]</td>
<td>500–720 [900–1,100]</td>
</tr>
</tbody>
</table>

What is the issue you would like the board to address and why? During deliberations of the Feasibility Assessment for Maintaining or Increasing Sustainable Harvest of Moose in Game Management Unit 20A (Unit 20A Feasibility Assessment) at the February 2015 Board of Game (board) meeting in Wasilla, the board directed the department to provide an updated Unit 20A Feasibility Assessment in 2016 and recommended that the Intensive Management (IM) population and harvest objectives for moose in Unit 20A be revisited at that time. The current IM population and harvest objectives are 12,000–15,000 and 900–1,100 moose, respectively.

We recommend the IM population objective be changed back to 10,000–12,000 moose, the population objective prior to 2012. The number of moose in Unit 20A was estimated at 17,768 (±13% @ 90% Confidence Interval [CI]) in 2003. Research indicated this high-density moose population was experiencing density-dependent effects, including low productivity, relatively light calf weights, and high removal rates of winter forage. The objective beginning in regulatory year 2004–2005 (RY04) was to reduce moose numbers to the population objective of 10,000–12,000 and stabilize the population at that level, unless indicators of moose condition showed signs of improvement at higher densities. The Unit 20A population was estimated at 12,193 (±13% @ 90% CI) moose in 2012 and at that lower population level, we had not detected any improvements in the nutritional status of the moose population based on annual twinning rates.

In 2013, the Unit 20A population was estimated at 10,156 (±11% @ 90% CI) moose, although we speculate that that estimate may have been biased low due to poor sightability. Unfortunately, we were unable to conduct a population estimate in 2014 due to the lack of sufficient snow. At this lower population level, we have detected only minor improvements in the nutritional status of the moose population (i.e., 5%–6% increases in body mass of 10–month old females). If nutritional status does not show further improvement, the department proposes to stabilize the
population at 10,000–12,000 moose, while continuing to monitor nutritional status. Overall, our goal is to sustain the health and habitat of the moose population over the long term.

We also recommend lowering the harvest objective from 900–1,100 moose (~9% harvest rate) to 500–720 moose (5%–6% harvest rate). We observed a population decline during RY03–RY06 with reported harvest rates of 6%–8% and predict population stability at reported harvest rates of 5%–6% (harvest rates of males at 4%–5% and females 1%–2%).

PROPOSED BY: Alaska Department of Fish and Game (ACR-C15-13)