PROPOSAL 207

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

Close brown bear hunting in Unit 9A as follows.

Page 65 in the 2020-2021 Alaska Hunting Regulations:

Proposed Action: Close Game Management Subunit 9A to brown bear hunting (currently designated as Registration Permit Hunts RB368 and RB370) with no open season in all Regulatory Years, odd and even.

As it stands now, it is recognized that in RY2022 all of Unit 9 is already closed to brown bear hunting and it should remain so. The intent of this proposal is to close future Regulatory Years to brown bear hunting in Unit 9A. It is also recognized a Spring RY2020 Unit 9 brown bear season was approved in 2020 and is ongoing at proposal deadline. Per ADF&G, results from that hunt will not be available until late June, 2021 at the earliest. And it is recognized fall and spring RY2021 Unit 9 brown bear hunts are already scheduled, making three consecutive season hunts (spring, fall, spring) at a time when the Unit 9A brown bear population is already overharvested. Consideration should also be given to closing Unit 9A brown bear seasons in RY2021 by emergency order.

What is the issue you would like the board to address and why? Brown bear management in Unit 9 is on a subunit basis. The brown bear population in Unit 9A is small, under increasing and unsustainable hunting pressure, and is likely declining. The Unit 9A hunting season should be closed in all regulatory years, odd and even, to protect that resource.

Measured by the number of permittees who reported hunting, ADF&G data indicates increasing hunting pressure RY2011-RY2017 in Unit 9A though it is decreasing in Unit 9 as a whole. Accordingly, based on ADF&G bear populations estimates and reported kills, the Unit 9A brown bear harvest is unsustainable. Contrary to Unit 9 as a whole, Unit 9A reported brown bear kills have been increasing RY2011-RY2017. Based on ADF&G Unit 9 population estimates and density extrapolations, the brown bear population estimate for the portion of Unit 9A open to hunting is low. The average annual harvest for the period RY2011-RY2017 from that same area open to hunting is 11.6%, well above the level ADF&G considers sustainable (6-8%).

Although "widely misinterpreted by Division staff" (Interpretation of Bear Harvest Data, Miller and Miller, 1990), brown bear age-at-death data is still used by ADF&G to evaluate the status of the Unit 9 brown bear population. Namely, ADF&G maintains the lack of change in that metric indicates a stable population. But even by that apparent misinterpretation, ADF&G harvest age data for Unit 9A shows a significant decline in the average age of harvested male bears from 2014-2015 to 2016-2017 (10.9 to 9.1 years of age). In 2018-2019 it fell further, to 8.1 years of age, though that was on a smaller sample size due to pandemic-influenced, reduced non-resident hunting effort.

While the area open to hunting is comparatively small, Unit 9A also represents an important link in the coastal brown bear habitat between Lake Clark National Park and McNeil River State Game Sanctuary and Refuge, both of which are increasingly popular brown bear viewing areas. Closing

Unit 9A to brown bear hunting would increase the opportunity, and just as important, the appeal for expanded bear-viewing along the coast with increased positive economic impacts to the state and local economies. ADF&G could institute a system similar to registration permits but which would require the payment of permit fees for bear-viewers and bear-viewing operators using that portion of Unit 9A to replace and likely dramatically increase any state revenue lost by its closure to bear hunting.

More analysis and information will be provided in proposal commentary when more data and reports are available from ADF&G in the coming months, including the first Species Management Report since 2014 which should be available by late summer. Based on some of the information available now, following is a more detailed analysis in support of the closure of Unit 9A to brown bear hunting. All data is from ADF&G reports and correspondence. In most cases, RY2019 data is not used for comparisons due to the pandemic-related anomaly of the Spring 2020 hunt.

Overall, since RY2011, registration permit data indicates the number of hunters in Unit 9 has been declining. The number of Unit 9 permittees who reported hunting in RY2017 was substantially lower, less than half (48.5%) of those who reported hunting in RY2011. Similarly, reported RY2011-RY2017 harvests for Unit 9 have been declining with the RY2017 reported harvest only 39.5% of RY2011 reported harvest.

But contrary to Unit 9 overall, in Unit 9A the number of permittees who reported hunting in RY2017 was substantially higher, an increase of 173.4% over those who reported hunting in Unit 9A in RY2011. Similarly, and contrary to Unit 9 as a whole, Unit 9A reported harvest in RY2017 was also substantially higher, up 157.5% from the RY2011 reported harvest.

These ADF&G permit and harvest data for Unit 9A indicate increasing hunting pressure and harvest in the small portion of Unit 9A open to hunting.

From the "Species Management Report & Plan, in prep. Crowley 2021, Table 1. Bear abundance and density estimates in Unit 9, 1989 – 2005", based on 2003 surveys, the most recent conducted in Unit 9A, the ADF&G average of the two 2003 Double Count Distance Sampling (DCDS) population estimates (693 and 703 bears) for all of Unit 9A, including areas closed to hunting, is 698 bears. From the same ADF&G report, the average of the two 2003 DCDS population estimates (367 and 406 bears) for the portion of Lake Clark National Park in Unit 9A, which is closed to hunting, is 387 bears. That leaves an average estimate of 311 bears in the areas of Unit 9A outside of Lake Clark National Park. However, the McNeil River State Game Sanctuary and Refuge is also part of Unit 9A and is also closed to bear hunting. The most recent published "Brown Bear Management Report" for Unit 9 (1 July 2012 to 30 June 2014) states "The McNeil River State Game Sanctuary and national parks within Unit 9 are thought to contain 2,000-2,500 additional brown bears." At a combined area of approximately 1000 km² for the Sanctuary and Refuge, and using the lowest ADF&G Unit 9A bear density estimate of 122 bears/1,000km2, that extrapolation would yield a population estimate of at least 100 bears in the McNeil River State Game Sanctuary and Refuge which is also closed to hunting. Using these most recent ADF&G-based estimates, the area of Unit 9A open to hunting has an estimated population of approximately 211 bears. This is considerably lower than the Unit 9A estimate of 296 bears in the area open to hunting which ADF&G had used for 30+ years.

For the four regulatory years with open seasons (RY2011, RY2013, RY2015 and RY2017), ADF&G Unit 9A reported brown bear harvest data (not including illegal or unreported kills) is 40, 45, 48, and 63 respectively. The average of the annual reported harvest percentage during that eight-calendar year period is 11.6%, well above the level ADF&G considers sustainable (6-8%). The RY2017 reported harvest alone represents 29.8% of the estimated population in the Unit 9A area open to hunting. An additional Spring RY2020 Unit 9 season was approved by the Board of Game (board) in 2020. Results from that hunt are not available as of the proposal deadline. RY2021 Unit 9 fall and spring hunts are already approved making a total of three consecutive Unit 9 open seasons when Unit 9A has already been subject to unsustainable hunting pressure. Conservative management principles would include closing Unit 9A brown bear seasons in RY2021 as well.

In Unit 9A, the small part currently open to hunting representing a small part of total Unit 9, there is another, more sustainable and revenue-producing use of brown bear. The economic impact of bear-viewing and the bear viewing industry has grown dramatically along western Cook Inlet from Lake Clark National Park to the McNeil River State Game Sanctuary and Refuge and Katmai National Park. Closing Unit 9A to brown bear hunting and the elimination of the current unsustainable harvest level will promote even more bear-viewing opportunity and positive economic impact as the Unit 9A bear population increases. ADF&G could implement a fee-based registration permit system for bear-viewers and bear-viewing operations using the state lands in Unit 9A between Lake Clark National Park and the McNeil River State Game Sanctuary and Refuge. This would result in a substantial boost to ADF&G revenue and allow bear-viewers to financially support their interests in wildlife. And the inevitable increase in the Unit 9A brown bear population will also in time increase the population in adjacent Unit 9B, which would remain open to hunting on the alternating, odd-RY schedule.

I urge approval of this proposal and will provide additional information before the January 2022 Board of Game meeting comment deadline.

PROPOSED BY: Wayne Hall (HQ-F21-016)