

PROPOSAL 52

5 AAC 84.270. Furbearer trapping.

5 AAC 85.056. Hunting seasons and bag limits for wolf.

5 AAC 92.008. Harvest guideline levels.

Establish a harvest quota for wolves, between 20% and 35% of the estimated wolf population in Unit 2 as follows:

General authority, as applicable: 5 AAC 84.270 (13), 5 AAC 85.056(1), 5 AAC 92.008.

5 AAC 92.008 is amended to read:

A harvest quota between 20% - 35% of the estimated population of wolves in Unit 2 is established by the Board of Game based on conservation concerns.

As a matter of policy, the Board of Game should establish an allowable percent mortality figure that varies between 20% and 35%, depending on where the current population sits relative to the objective. If the population needs to be reduced to meet population objectives, the Board of Game can institute a 35% mortality guideline. If, on the other hand, there is a conservation concern for wolves, a lower cap of 20% can be instituted.

This approach provides to trappers the maximum possible number of wolves to harvest while honoring the constitutional sustainability requirement, and moving towards the population objective. It is a biologically driven, based on empirical data from Unit 2, and can be set in a clear and transparent fashion by the board. Establishing this percentage is consistent with past practice, and will be even more successful as the department improves on its ability to estimate wolf population size and monitor in-season harvest.

What is the issue you would like the board to address and why? Neither the Board of Game nor the department has established a sustainable wolf harvest level for Unit 2.

The department is obligated under the Alaska State Constitution to manage wildlife resources on the sustained yield principle.¹ In common terms, sustained yield means managing for an ongoing annual harvest without jeopardizing the harvest (or yield) for future generations.

The percentage of a population that can be harvested annually, in perpetuity, is driven by various population traits, including age and sex structure, productivity, recruitment, immigration and natural mortality. Where human-caused mortality is compensatory, and immigration likely, human harvest rates of 17-48% of wolf populations can be sustained. If there is no possible immigration (as on Unit 2), or if human-caused mortality is partially additive to natural mortality, sustainable rates are lower—in the range of 22-25%.²

In studies of the wolf population on Unit 2, it was determined that in order to maintain current population levels, a level of mortality (from all causes: including natural, legal, and illegal harvest) for wolves in southeast Alaska is 30-35%³

The Board of Game has variously set the percentage of sustainable mortality between 20-30%, adopting the more conservative figure in years of particularly acute conservation concerns, and 30% in years of lesser concern.⁴

¹§ 4. **Sustained Yield** — Fish, forests, wildlife, grasslands, and all other replenishable resources belong to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses. From: *The Alaska State Constitution*.

²“Most studies demonstrate that high rates of reproduction and immigration can compensate for human-caused mortality rates of 17–48% (±8%; Fuller et al. 2003, pp. 184–185; Adams et al. 2008 [29%], p. 22; Creel and Rotella 2010 [22%], p. 5; Sparkman et al. 2011 [28%], p. 5; Gude et al. 2012 [25%], pp. 113–116). However, results of other studies suggest that harvest of wolves by humans are at least partially additive (Murray et al. 2010, pp. 2519–2520), and therefore, sustainable mortality rates may be lower than expected (~22–25%; Creel and Rotella 2010, p. 5). From: *Wolf Technical Committee. 2017. Interagency Wolf Habitat Management Program: Recommendations for Game Management Unit 2. Management Bulletin R10-MB-822. USDA Forest Service, USDI Fish and Wildlife Service, and Alaska Department of Fish and Game*.

³“Based on our analysis of birth rates and population size for wolves on Prince of Wales and Kosiushko Islands, we estimate the per capita birth rate for wolves to be approximately 0.33 (SE = 0.15). The buffering effects of immigration and emigration are probably limited for most of the wolves in southeast Alaska; consequently, total annual mortality should not exceed reproduction to maintain current population levels. Thus, to maintain current population levels, a level of mortality (from all causes; including natural, legal, and illegal harvest) for wolves in southeast Alaska is likely to be less than or equal to 30 to 35 percent. From: *Person, David K.; Kirchhoff, Matthew; Van Ballenberghe, Victor; Iverson, George C.; Grossman, Edward. 1996. The Alexander Archipelago wolf: a conservation assessment. Gen. Tech. Rep. PNW-GTR-384. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 42 p.*

⁴Since 1997, there have been 2 years at 25%, 17 years at 30%, and 3 years at 20%.

PROPOSED BY: Alaska Wildlife Alliance

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