

Proposal 150

5 AAC 92.XXX. New Regulation

Establish IM area in 20D for Moose recovery as follows:

What solution do you recommend? In other words, if the board adopted your solution, what would the new regulation say?

“The Intensive Management area shall consist of that portion of Game Management Unit 20D north of the Tanana River. The department may implement predator control measures, including aerial control and public permit programs, to reduce predator densities to levels to allow the moose population to return to historic densities.”

Objective:

We recommend using moose density thresholds to determine when to turn predator control on and off, and when to harvest cows, to maintain the moose population near historic density of ~ 1.3 moose/sq mile in 20D north. Reduce wolf densities to 5–10 wolves per 1,000 square miles to improve moose calf survival and population growth.

Control Area: All lands within GMU 20D north of the Tanana River.

Methods:

- Public aerial control (Same-Day Airborne) under permit
- Use of aircraft, including helicopters, for access to place traps and snares
- Department aerial removal using helicopters if necessary

Strategy:

- Initial reduction phase to lower predator densities
- Maintenance phase through ongoing public and department efforts
- Annual moose population surveys
- Calf-to-cow ratios
- Wolf population surveys (as available)
- Hunter success rates

Management actions will be adjusted as needed based on observed results:

- Increased calf survival and recruitment
- Moose population growth toward objective levels
- Reversal of current population decline
- Increased hunter success and opportunity

In addition, as part of a holistic moose management program, we recommend ADF&G work with Forestry to outline limited suppression areas in northern 20D to allow Wildland fires to burn. Also to consider implementing prescribed fires and developing a program to crush or roller chop designated areas each year in road or trail accessible portions of this area to maintain moose habitat.

The moose population in GMU 20D North is declining despite adequate habitat conditions. Persistent low recruitment and high predator populations indicate a predator-limited system. Reestablishing an Intensive Management program is necessary to restore moose populations and provide for sustained human use in accordance with Alaska's sustained yield mandate.

What is the issue you would like the board to address and why?

We have concerns about being able to maintain moose numbers in 20D north. Moose survey data shows a downward trend in population density and persistently low recruitment. Calf-to-cow ratios are consistently below levels required for population growth (15:100 in 2019, 18:100 in 2021, and 16:100 in 2024). These values are well below the generally accepted threshold of 25 calves per 100 cows necessary for population stability or growth. This moose population declined ~ 40% following the severe weather event during the winter of 2021-2022. With low recruitment this population is at risk of further decline.

Historical evidence from the Upper Yukon–Tanana Predator Control Program (2005–2018) demonstrates that predator control can be effective in this region. Predator populations are abundant following cessation of predator control efforts in 2018. This combination of declining moose density, chronically low recruitment, and high predator abundance indicates that predation is a primary limiting factor in 20D north.

The habitat within GMU 20D North can support increased moose abundance. The 2004 Alaska wildfire season, the largest on record, burned over 6.6 million acres statewide and included extensive fires in the Upper Tanana region, including the Taylor Complex Fire, which burned over 1.3 million acres. As a result, large portions of GMU 20D North are within the 10–20 year post-fire stage, which provides optimal moose habitat. Regenerating vegetation such as willow, birch, and aspen provides abundant, high-quality forage. More recent wildfire activity has continued to create and maintain excellent habitat, resulting in a diverse mosaic of vegetation conditions across the landscape. Despite these favorable habitat conditions, moose populations have declined, demonstrating that habitat is not the limiting factor and supporting the conclusion that predation is the primary constraint on population growth.

Current moose densities in northern Unit 20D offer adequate hunter opportunity but are below the carrying capacity of the habitat. Rather than trying to continue to increase the population to a higher level closer to carrying capacity, we recommend ADF&G manage for a level of predator removal adequate to return this slow growing population to historic density levels. Without action, continued decline in the moose population may further reduce hunter success and lead to more restrictive harvest regulations. Predator control is needed in this area to aid in the recovery of the moose population to near or above historic levels, ensure calf:cows ratio support population growth as to avoid implementing moose harvest restrictions.

Did you develop your proposal in coordination with others, or with your local fish and game advisory committee?

Yes this proposal came out of the Delta Junction Advisory Committee with assistance from ADFG Area Biologists in the Delta office.

PROPOSED BY: Delta Fish & Game Advisory Committee (OI-F26-152)
