

Western Interior Alaska Subsistence Regional Advisory Council
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Action Requested:

The Western Interior Alaska Subsistence Regional Advisory Council requests that Dall's sheep hunting on Federal public lands in Unit 24A and Unit 26B, west of the Sagavanirktok River be closed to all users for the 2022-2024 wildlife regulatory cycle.

Existing Federal Regulations:

Unit 24- Sheep

*Unit 24A, except that portion within the Gates of the Arctic National Park - 1 ram Aug. 20-Sep. 30.
by Federal registration permit only*

Unit 26- Sheep

*Unit 26B, that portion within the Dalton Highway Corridor Management Area - 1 Aug. 10-Sep. 20.
ram with 7/8 curl or larger horn by Federal registration permit only*

*Unit 26A, remainder and 26B, remainder, including the Gates of the Arctic Aug. 10-Sep. 20.
National Preserve - 1 ram with 7/8 curl or larger horn*

Proposed Federal Regulations:

Unit 24- Sheep

*Unit 24A, except that portion within the Gates of the Arctic National Park -1 ram Aug. 20-Sep. 30.
by Federal registration permit only No open season*

Federal public lands are closed to the taking of sheep for the 2022-2024 regulatory cycle for non-Federally qualified users and Federally qualified subsistence users.

Unit 26- Sheep

*Unit 26B, that portion within the Dalton Highway Corridor Management Area, Aug. 10-Sep. 20.
west of the Sagavanirktok. -1 ram with 7/8 curl or larger horn by Federal No open season
registration permit only*

Federal public lands are closed to the taking of sheep for the 2022-2024 regulatory cycle for non-Federally qualified users and Federally qualified subsistence users.

*Unit 26A, remainder and 26B, remainder, including the Gates of the Arctic Aug. 10-Sep. 20.
National Preserve and Unit 26B, east of the Sagavanirktok River - 1 ram with 7/8
curl or larger horn*

Unit 26B remainder, including Gates of the Arctic National Preserve No open season

Federal public lands are closed to the taking of sheep for the 2022-2024 regulatory cycle for non-Federally qualified users and Federally qualified subsistence users.

Significant Changes in Resource

At its October 2021 meeting, the Council had lengthy discussions with the National Park Service (NPS) and BLM regarding the Dall's sheep population in the Brooks Range as this has been a serious concern since 2018. This decrease of the sheep population is occurring primarily on the south slope of the Central Brooks Range in GMU 24A and 24B, and on the North Slope of the Brooks Range in GMU 26B west of the Sagavaniriktok River. The Council wishes to express its continued frustration that Traditional Ecological Knowledge (TEK) over the past decade regarding this issue has been ignored. Subsistence users have observed the decline in this population of Dall's sheep, and recent surveys by biologists now show that this population is in genuine crisis.

Local users who rely on Dall's sheep in this region for subsistence have reported the devastating effects of extreme weather events on the population, including early large snowfalls and rain on snow events, creating impenetrable ice conditions. State management has large biological data lacks and extreme risk to the Dall Sheep populations in the Central Brooks Range.

As Chairman of the WIRAC, and a C&T federally qualified subsistence user, I Jack Reakoff write the following narrative for the Federal Subsistence Board's understanding for the needed Wildlife Special Action Request.

Winters with rain on snow and late springs have been highly detrimental to the Dall sheep populations since 2012/13. There was rain on snow mid-winter, then a very late melt in the spring of 2013. Almost all yearling sheep produced in 2012 were lost; 2013 lambs were very few as well as in 2014 when lamb production was very low with 1-6 lambs per 100 ewe-likes. Many adult sheep older than 8 years old were lost also in the 2012/13 winter. Subsequently, now there are very few or no breeding rams older than 8 years old.

The suppressed population was beginning to recover from 2015 to 2018, when snow in late October when it rained .49" in three days on the mountains. (I take weather for the NWS daily). The snowfall throughout the winter of 2018/19" totaled 146.5 inches measured. In late March there was another rain on very deep snow event with liquid rain totaling .91" with ice on the ground previously. The wind could not blow the snow off the mountains for the sheep. The very deep alpine snow, which coupled with the rain, caused unusually high sheep die-offs. Snowmelt typically does not occur until mid-May in sheep habitat. The glazed ridges were endured for weeks, many sheep did not survive due to starvation. All yearling sheep were lost and there were significant adult losses of sheep 8 years and older, especially on the South slope in GMU 24A, with no losses in GMU26B North Slope.

The lamb production of surviving ewes in the summer of 2019 were very few and poor quality. The winter stressed surviving ewes who had little to give to lactation. All sheep observed through mid-September were thin; no yearlings were observed, and lambs were considerably smaller, for September. In mid-September there was an early deep snow event of approximately 1.5 feet of wet snow in the alpine. Sheep were pushed lower off the prime ridges used in winter. In late October there was again another very unusual rain on snow event, totaling 1.69" in three days. The alpine received very deep snow that was soaked in rain and crusted. The glazed ridges could not blow off for the sheep to access feed. There was significant snowpack in the alpine through mid April of 2020 when again another very unusual rain on snow event occurred, totaling .78". This rain on snow extended widely on the South Slope in GMU24A and 24B and over the divide of the Brooks Range into 26B west of the Sagavaniriktok River. Wet snow slides were extensive both years.

The losses of sheep on the South Slope were unprecedented in the 110-year oral history of Dall sheep in the Central Brooks Range. There were losses of all or most yearlings, and lamb production was very low with a poor cohort, again due to the very few surviving ewes' condition. In September of 2020, the sheep were again in thin condition and the one lamb surviving to fall I observed was very small at the end of the end of September. There were very few lambs observed in GMU26B west and adult population numbers were significantly affected. No yearlings, or sheep older than 7 were observed there.

The very few groups of surviving sheep in the 2020/21 winter had significant wolf predation. Wolf populations explode on deep snow winters when ungulates are restricted. The Porcupine Caribou herd came into GMU24A east to the Dalton Highway. The wolf population used some of those caribou but it allowed the wolves to survive at high numbers to take sheep when the caribou left in the spring.

Adult sheep and lambs seen in September 2020 were missing in the spring of 2021 when there are very few yearlings. An individual sheep's exposure to predation is very high when populations are this low.

The winter of 2021/22 to date has had a winter without rain as of February, but the snowfall is at 100" to date.

The remaining Dall sheep population using survey data from the NPS, BLM and ADFG 2021 data is approximately 25% compared to the 2012 survey data for GMU 24A. The 2021 lamb crop is having a bad winter in deep snow, with high rates of predation. The outlook for this 2021 lamb cohort is anticipated to be low survival.

The land managing agencies do not collect age composition of the ram composition. They do not classify rams as 1/2 curl, 3/4 curl, or 7/8 curl. ADFG and other agency managers only classify 4/4 full curl.

ADFG, and other managers have no idea what the current make-up of the populations are. Prudent classification would allow management to see the impending cliff with the loss of the last breeding rams taken under the full curl strategy in the next two years.

GMU 24A has the longest hunting seasons in Alaska, combined with high hunter participation and access. The General hunt in the DHCMA in GMU24A, which has run through October 5 since the 2020 regulatory year, was endorsed by the ADFG Region III staff during deliberation to extend the season.

ADFG currently tells the public that sheep will emigrate out of Park Units, which has no valid basis. Dall Sheep do not migrate and rarely emigrate away from the habitat they know. Most telemetry work shows sheep rarely move over 6-12 miles throughout their lives. Sheep are even less inclined to move when at low population number like now. They are not in competition for food, predation is high, and so the sheep are staying in very limited areas in aggregates. The remaining sheep have a higher success of survival against predation by staying put. Gates of the Arctic NPS lands have the same age class demographics, which are very similar to outside the unit, having also lost the same cohorts over the last ten years to weather.

I have 55 years field experience hunting and observing sheep. I use 10 power binoculars and a 30-power Zeiss optics to classify sheep with. I live year round with the sheep in GMU 24A and 26B.

There are very few if any 2, 3, 4, and 5-year-old recruited rams in the current adult ram groups. All or most of those cohorts were lost in the recent deep snow and ice events described above, as well as by predation. The last surviving adult breeding rams currently are predominately 6 and 7 years old. The few legal rams classified in the 2021 survey as 4/4 full curl were harvested in the fall of 2021.

There were a minimum of 50 general hunters in GMU24A under State regulation, after the survey in July. ADFG admittedly seized 10% of the sheep in Alaska as sub-legal, which were presented for sealing in 2021. There is also an uncalculated and ignored, incidental harvest mortality (wound loss), and sub-legal rams discarded when taken by novice hunters who evade prosecution. I personally watched two hunters in September 2021 stalk two sublegal rams for two days, intending to take them.

There are known detrimental biological ramifications of 4 year old and younger rams breeding adult ewes, once most breeding age rams are eliminated. The current State Dall Sheep management strategy was developed through the biological work done by Heimer and Watson (1986). This work compared full curl and 3/4 curl management in two different areas in the Alaska Range. The study showed that if all older rams are eliminated as was done with 3/4-curl full extirpation ram harvest, the young rams left to breed have higher mortality post rut due to breeding stress, and lamb production is compromised. The 3/4 curl management strategy was used in GMU20 west during the 1960s through the 80s where rams were harvested to the maximum.

The current adopted full curl management works, but **only if** there are consistent recruitments of young rams up to the breeding class. The work in the study period had cold winters without rain events, with wind swept winter habitat. Management did not consider the loss of several cohorts with rain on snow events when full curl, 8-years old or broken horns was implemented. Current ADFG management uses flawed survey data. Data does not have any assessment of these losses by ignoring this vital data collection. I observe there are currently no 1/4, 1/2 or 3/4 curl rams joining the very few strong, surviving 6 and 7 year old adult rams.

Rams that are 5 years old and younger are 30-40% smaller than adult rams 6-10 years of age. Older rams are extremely necessary in the population. Older rams have larger pre-rut fat reserves to sustain breeding stress, and

they maintain estrus timing in adult ewes, and break trail in deep snow years for younger rams as well as ewes and lambs.

As importantly, older rams learned predator detection and evasion skills from older rams before them. Habitat knowledge is passed on to younger sheep. The last breeding rams here now harbor the strongest survival phenotype genetics. They had and have the strength and intelligence needed to survive the brutal conditions they have endured. If hunters are allowed to kill these last breeding rams in the next two years, which will happen with the current harvest power and participation, there will be a huge loss to young ram recruitment ability. The smaller rams will die at an elevated rate from breeding stress and increased exposure to predation due to the lack of leadership from older rams.

The full curl management strategy was designed to maintain breeding 6-8 year old rams in the population. Current state management blindly continues to harvest without understanding the population demographics. Continued state harvest regulations will violate ANILCA title VIII's mandate to maintain healthy populations using recognized scientific principles. Let alone violate the State of Alaska Constitutional mandate for sustained yield. State full curl management without consistent recruitment violates known scientific principles. Fully extirpating the remaining adult rams over the next two critical years will exacerbate the recovery of the much-diminished Dall sheep population in GMU 24A, and GMU 26B west.

I have refused to harvest a sheep since 2018 when this population has been in hardship. I have been bearing, as many subsistence hunters here have, the burden of conservation. WSA22-01 will close for two years subsistence and non-subsistence hunting on the federal lands to assure the healthy recovery of the Dall Sheep populations in GMU 24A and GMU26B west. The closure will share the burden of conservation across all user groups equitably. This is truly a critical point in the long-term survival of the Central Brooks Range Dall Sheep population in these Game Management Units.

The Western Interior Alaska Regional Advisory Council met February 16/17, 2022. After extensive discussion over the last three years, recent aerial survey data was produced in 2021, and after extensive testimony and discussion of the scientific literature by Chairman Reakoff and agency staff presentations, the Council concluded to vote unanimously to submit these requested closures.

