



Federal Subsistence Board News Release



U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Forest Service

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Federal Subsistence Board Closes Fall 2023 Sheep Season in Yukon-Charlie Rivers National Preserve

The Federal Subsistence Board (Board) approved WSA23-05 to close the sheep season to all users in Yukon-Charley Rivers National Preserve (YUCH) within Units 20E and 25C from August 10 – September 20, 2023.

Emergency Wildlife Special Action WSA23-05 was submitted by the National Park Service requesting the sheep season in Yukon-Charley Rivers National Preserve be closed for fall 2023 to assure the continued viability of the sheep within YUCH. The Board approved WSA23-05 recognizing a conservation concern due to a dramatic decline in the number of observed sheep within YUCH south of the Yukon River.

The most recent minimum count survey data from NPS shows the sheep abundance within YUCH is in serious decline. The July 2023 count was 72 total animals detected, a decrease of 67% since the last survey in 2018 and a 77% decrease from the long-term average. The minimum count survey observed only two legal rams across all survey areas. Unit 25B is not included in this closure as sheep abundance in the Ogilvie Mountains survey area has declined by only 28% since the 2018 survey. The closure only affects NPS managed lands in Units 20E and 25C. Excluding NPS-managed lands in Unit 25B from the closure will provide some subsistence opportunity while also allowing for State harvest. This closure within YUCH in Units 20E and 25C is consistent with ANILCA Section 816(b) and is needed for conservation of sheep within YUCH and to provide for the continuation of subsistence uses of the sheep resource in the long-term.

Additional information on the Federal Subsistence Management Program may be found on the web at www.doi.gov/subsistence or by visiting www.facebook.com/subsistencealaska.

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STAFF ANALYSIS
EMERGENCY SPECIAL ACTION
WSA23-05

ISSUES

Emergency Wildlife Special Action WSA23-05, submitted by the National Park Service (NPS)/Yukon-Charley Rivers National Preserve (YUCH), requests to close harvest of sheep for all users within YUCH in Units 20E and 25C (**Figure 1**) for the fall 2023 season to assure the continued viability of the sheep within YUCH.

DISCUSSION

The NPS/YUCH requests an Emergency Special Action to close harvest of sheep for all users (both State and Federal subsistence hunts) within YUCH in Unit 20E, and Unit 25C for the fall 2023 season to assure the continued viability of the sheep population within YUCH. Such a closure is authorized by 816(b) of ANILCA and under 50 CFR 100.19(a). The NPS conducted a minimum count aerial survey for Dall's sheep July 18th–20th, 2023. The survey only detected 72 sheep in the seven core mountain units. This constitutes a 77% decrease from the long-term average of 313 sheep.

The applicable Federal regulations are found in 50 CFR 100.19(a) (Emergency Special Actions) and state that:

“...In an emergency situation, if necessary to ensure the continued viability of a fish or wildlife population, to continue subsistence uses of fish or wildlife, or for public safety reasons, the Board may immediately open or close public lands for the taking of fish and wildlife for subsistence uses, or modify the requirements for take for subsistence uses, or close public lands to take for nonsubsistence uses of fish and wildlife, or restrict the requirements for take for nonsubsistence uses.”

Existing Federal Regulation

Unit 20— Sheep

Unit 20E—1 ram with full-curl horn or larger

Aug. 10–Sep. 20.

Unit 25—Sheep

Units 25B, 25C, and 25D—1 ram with full-curl horn or larger

Aug. 10–Sep. 20.

Proposed Federal Regulation

Unit 20— Sheep

Unit 20E—1 ram with full-curl horn or larger

Aug. 10–Sep. 20.

***No open season
within Yukon-
Charley Rivers
National Preserve.***

Unit 25— Sheep

Units 25B, ~~25C~~, and 25D—1 ram with full-curl horn or larger

Aug. 10–Sep. 20.

Unit 25C

***No open season
within Yukon-
Charley Rivers
National Preserve.***

Existing State Regulation

Unit 20—Dall Sheep

*Units 20D and 20E, north of the
Alaska Highway; and north and west
of the north bank of the Middle Fork
of the Fortymile River upstream from
and including the Joseph Creek
drainage*

*Residents— One ram with
full-curl horn or larger by
permit.*

*Nonresidents— One ram
with full-curl horn or larger
every four regulatory years
by permit*

DS206 Aug 10-Sept 20

Units 25B, 25C, 25D

*Residents— One ram with
full-curl horn or larger.
Youth hunt only.*

*Nonresidents— One ram
with full-curl horn or larger*

HT Aug 1-Aug 5

every four regulatory years.
Youth hunt only.

Units 25B, 25C, 25D

Residents— One ram with HT Aug 10-Sept 20
full-curl horn or larger.

Nonresidents— One ram
with full-curl horn or larger
every four regulatory years.

Extent of Federal Public Lands

Federal public lands comprise approximately 27% of Unit 20E and consist of 21% NPS managed lands and 6% Bureau of Land Management (BLM) managed lands.

Federal public lands comprise approximately 73% of Unit 25C and consist of 62% BLM managed lands, 9% NPS managed lands, and 2% U>S> Fish and Wildlife Service (USFWS) managed lands.

Customary and Traditional Use Determinations

Residents of Units 20E, 25B, 25C, 25D, and Dot Lake, Healy Lake, Northway, Tanacross, Tetlin, and Tok have a customary and traditional use determination for sheep in Unit 20E.

Residents of Units 20E, 25B, 25C, and 25D have a customary and traditional use determination for sheep in Unit 25C.

Regulatory History

Prior to 2014 there was no Federal hunting season for sheep in Units 20E or 25C.

In 2014, the Federal Subsistence Board (Board) adopted Wildlife Proposals WP14-42 and WP14-43. Proposal WP14-42 recognized the current customary and traditional use determination for sheep in Units 20E, 25B, and 25C. Proposal WP14-43 established the current Federal hunting season and harvest limit for sheep in Units 20E, 25B, and 25C.

Biological Background

The YUCH includes portions of Units 20E, 25B, and 25C (**Figure 1**). Dall sheep (*Ovis dalli*)¹ inhabit the mountains and river bluffs of YUCH at low density. Sheep surveys in the YUCH area started as early as 1973. Since 1997, aerial sheep surveys in YUCH have focused on seven survey areas (5580 Mountain, Charley River Bluffs, Cirque Lakes, Copper Mountain, Diamond Fork Mountain, Mount Sorenson and Twin Mountain) (**Figure 2**, Joly et al. 2018). Sheep surveys were flown in the southwestern portion of the

¹ Found in literature as Dall and Dall's sheep. Will be referenced as sheep for the remainder of the analysis.

preserve between 1983 and 2009. However, due to extensive and frequent movement of sheep between survey areas, evaluating trends from these surveys has been difficult, especially for years when the entire survey area was not flown (Burch 2010). Burch (2010) stated that comparable years include 1997, 1998, 1999, 2001, 2002, and 2009. Based on those surveys, the sheep population appeared stable at that time, with good lamb survival and yearling recruitment (**Figure 3**, Burch 2010).

Major declines in sheep populations across Alaska in 2013 and 2014 were mirrored in YUCH, which had a 48% decline in sheep abundance between 2009 and 2015 (**Figure 3**, Joly 2015). In isolated survey areas, declines were as high as 96%. Winters between 2015 and 2017 were more moderate since the decline and it was thought the population might be rebounding (Joly et al. 2018).

The most recent surveys in the core areas within YUCH were conducted July 18th – 20th, 2023 (**Figure 2**). In the core area, 72 sheep (32 ewes, 13 lambs, 6 yearlings and 19 rams) were detected. This constitutes a 67% decrease from the last survey of 221 sheep in 2018 and a 77% decrease from the long-term average of 313 sheep (**Figure 3**, Sorum 2023). The survey areas with smaller abundance, 5580 Mountain, Copper Mountain, Diamond Fork Mountain, and Twin Mountain, experienced the largest declines (93%) when compared to the long-term average. For the first time, no sheep were observed in the Diamond Fork Mountain and Copper Mountain survey areas. The Charley River, Cirque Lakes, and Sorenson survey areas recorded 68% declines from the long-term average. In the Ogilvie Mountains, 26 sheep were detected (18 ewes, 4 lambs, 0 yearlings, and 4 rams), which is a 28% decline since the 2018 survey. Only two legal rams were observed across YUCH (Sorum 2023).

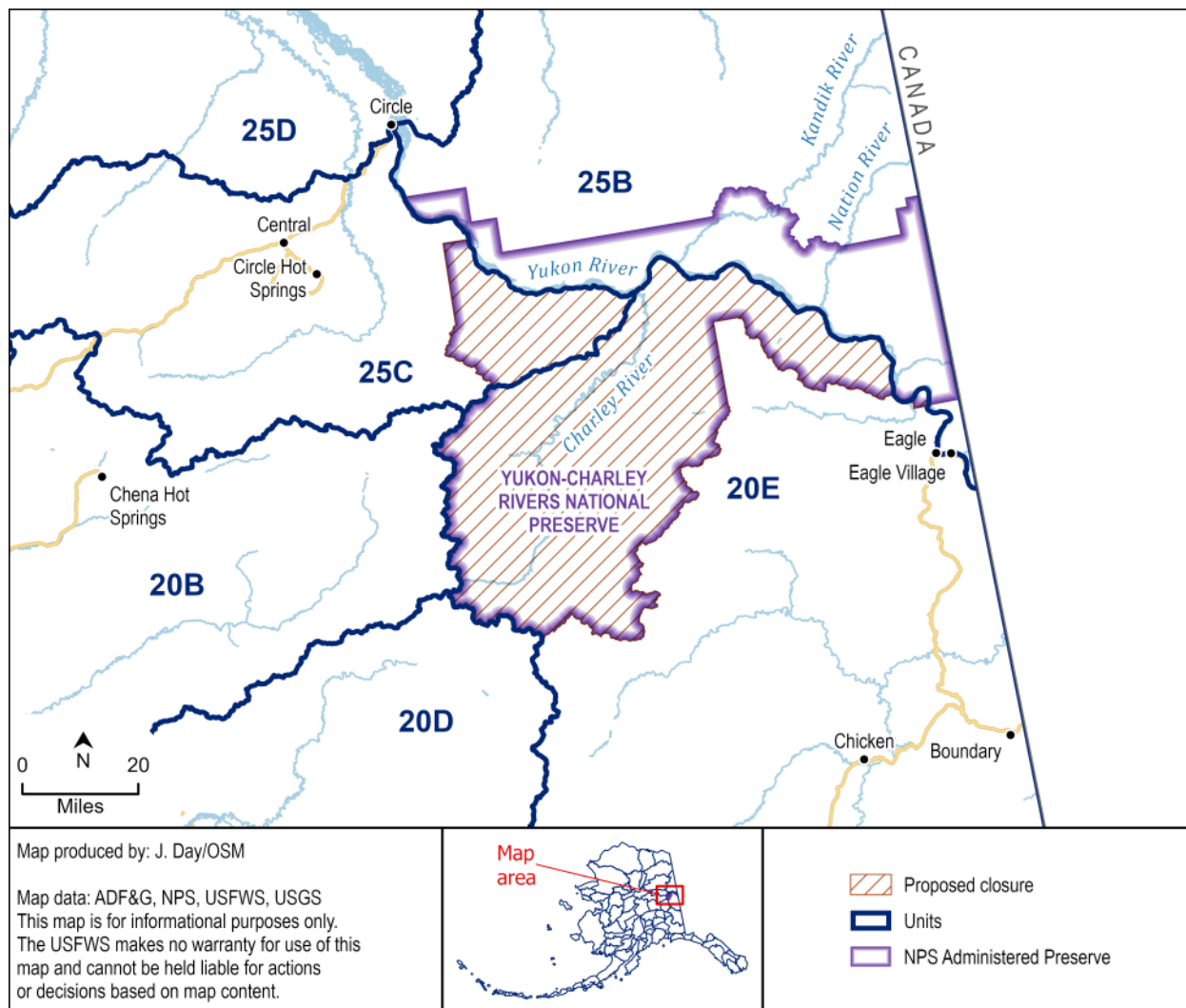


Figure 1. YUCH includes portions of Units 20E, 25B, and 25C.

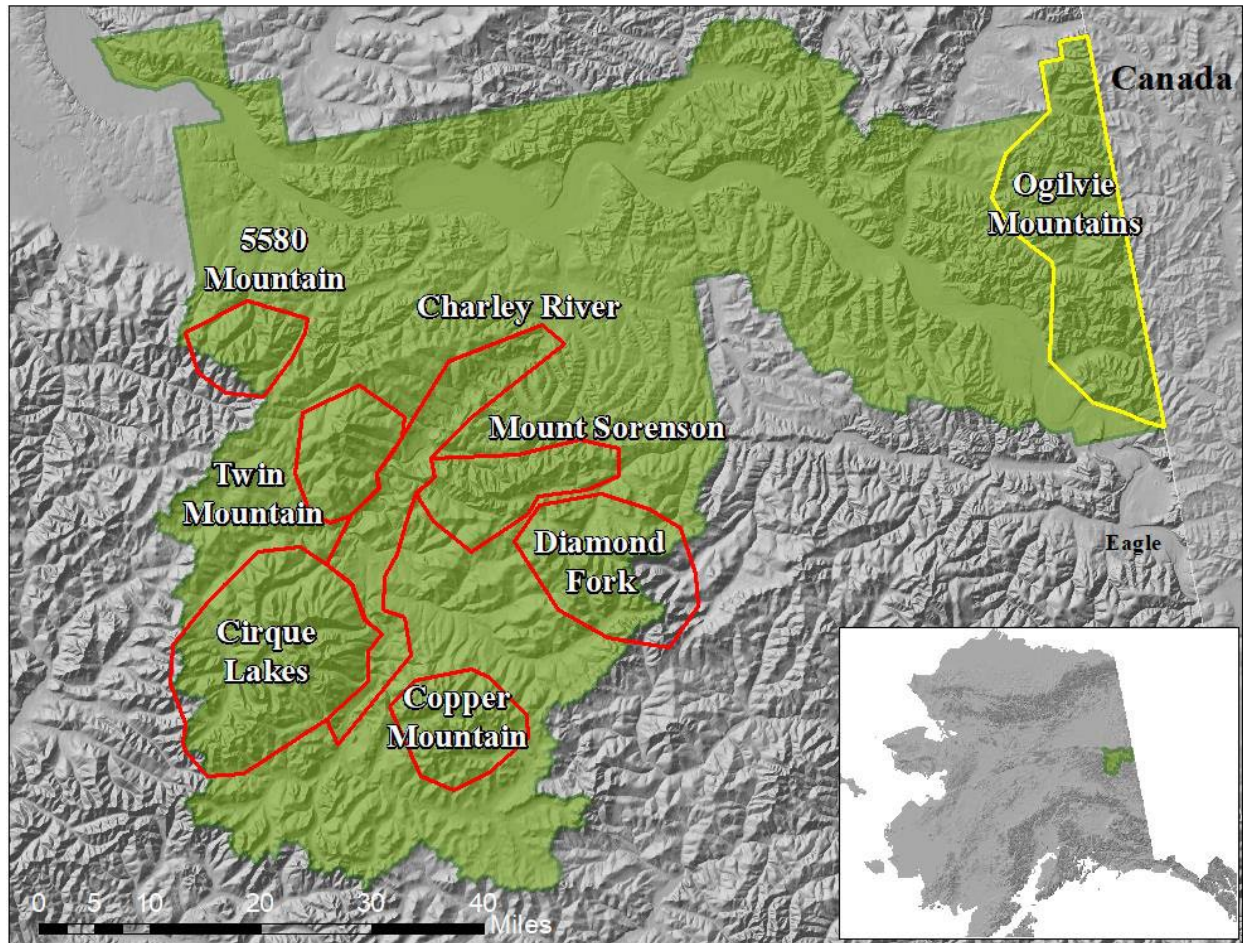


Figure 2. The core seven survey areas surveyed for sheep in YUCH (5580 Mountain, Charley River Bluffs, Cirque Lakes, Copper Mountain, Diamond Fork Mountain, Mount Sorenson, and Twin Mountain) (Joly et al. 2018).

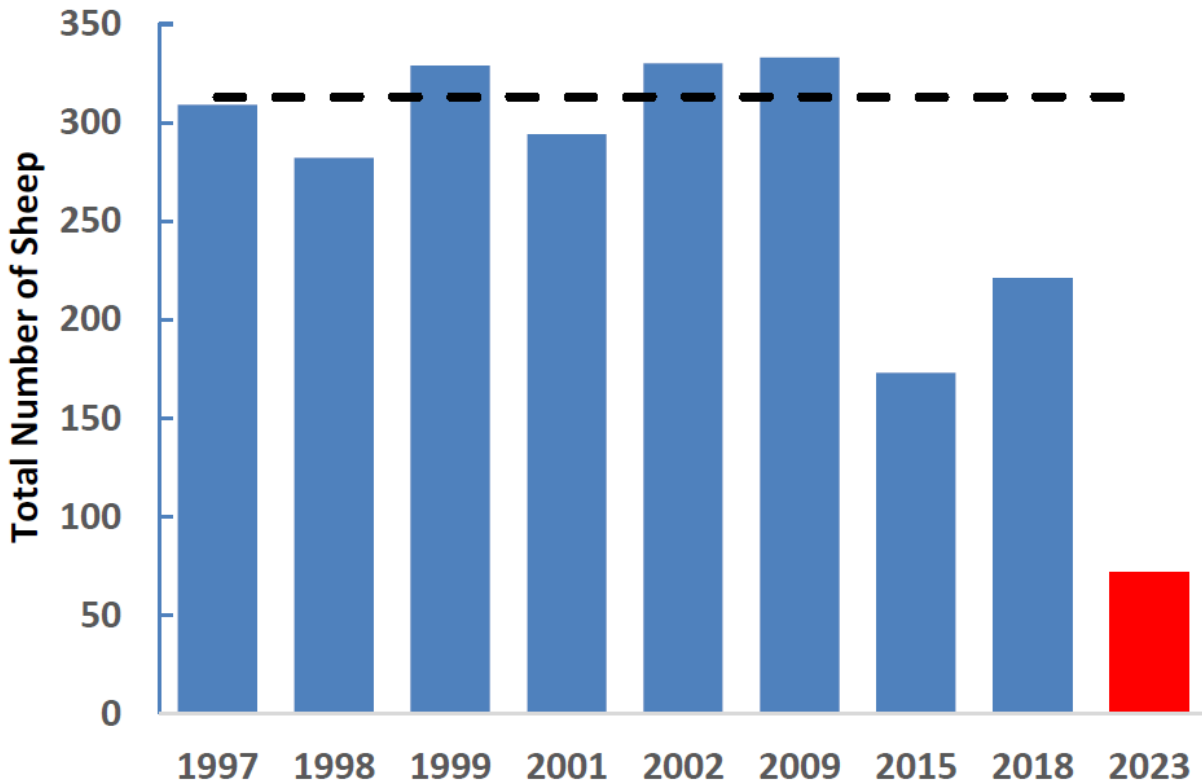


Figure 3. Dall sheep population trends in the core seven survey areas of YUCH, 1997-2023. Black dash line is the average for 1997-2009 (Sorum 2023).

Cultural Knowledge and Traditional Practices

Members of the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) have described declines in sheep populations both in their home regions and across the state. The primary reason cited for these declines is weather related including heavy snow and rain on snow events. One Council member reported seeing increased numbers of bears while sheep hunting and wondered if this might also be a factor. Council members have requested more intensive study and survey of sheep because they would like to better understand the declines (EISRAC 2022a: 241, 245, 251, 312; 2022b: 30, 33; 2021: 30).

Across Alaska, many rural subsistence users consider sheep an emergency survival food to be harvested when more accessible resources are not available (Pederson et al. 1985: 64-65, 72). Fishery closures and moose and caribou declines highlight the importance of sheep for subsistence users who find the decreasing numbers of sheep disturbing. One Council member stated, “[I am] concerned about the Dall sheep...[I am] concerned about the numbers because with our challenges with the caribou and the salmon, it is going to be an important food source for us” (EISRAC 2022a: 245).

Sheep hunting in this region is a well-documented Athabascan tradition and important to the Euro-American residents of this area. Descriptions of the knowledge of sheep possessed by Han, Gwich’in, Tanacross, and Upper Tanana Athabascans include the location of mineral licks used by sheep. In the past, sheep were most often caught with babiche (long strips of caribou or moose skin) snares, but hunters

sometimes took them with bows and arrows. Men hunted sheep in late summer and early fall when sheep were fat and their meat was in good condition, and to obtain sheepskins for winter. Tallow-rich ribs were favored and eaten fresh. Women dried much of the meat, cached it for later use, and made the skins into sleeping blankets or into warm winter pants and coats. Sheep horns were steamed, bent, and made into highly-prized spoons and dippers. Descriptions of sheep were repeated in stories and songs. In years when caribou were not available in significant numbers, moose, sheep, and fish were taken in larger numbers to compensate. In contemporary times, fall continues to be an important sheep hunting season (Caulfield 1979; Haynes and Simeone 2007; Mishler and Simeone 2004; McKennan 1981; Pedersen and Caulfield 1981).

Euro-American that live in this region rely heavily on the take of wild resources, especially near the Charley, Kandik, Nation, Tatonduk, Fortymile and Seventymile rivers in the YUCH during the twentieth century (see Caulfield 1979).

Harvest History

Within the boundaries of YUCH (portions of Unit 20E, 25B, 25C), an average of four rams were harvested per year between 1983 and 2007 (**Figure 4**, Joly et al., 2018). An increase in sheep harvest within the YUCH took place after hunting regulations changed from a drawing permit to a harvest ticket hunt in 1993, though at that time, the sheep population appeared to have remained stable (**Figure 4**, Burch 2010). The highest reported harvest occurred in 2005, of 12 rams. After 2005, harvest returned to a relatively low rate within the preserve, averaging 2.5 rams per year between 2006 and 2017 (**Figure 4**, Joly et al. 2018). The harvest rate within YUCH declined to an average of 1.4 rams per year between 2018 and 2022 with a range of 0–3 rams harvested per year (Mulligan 2023).

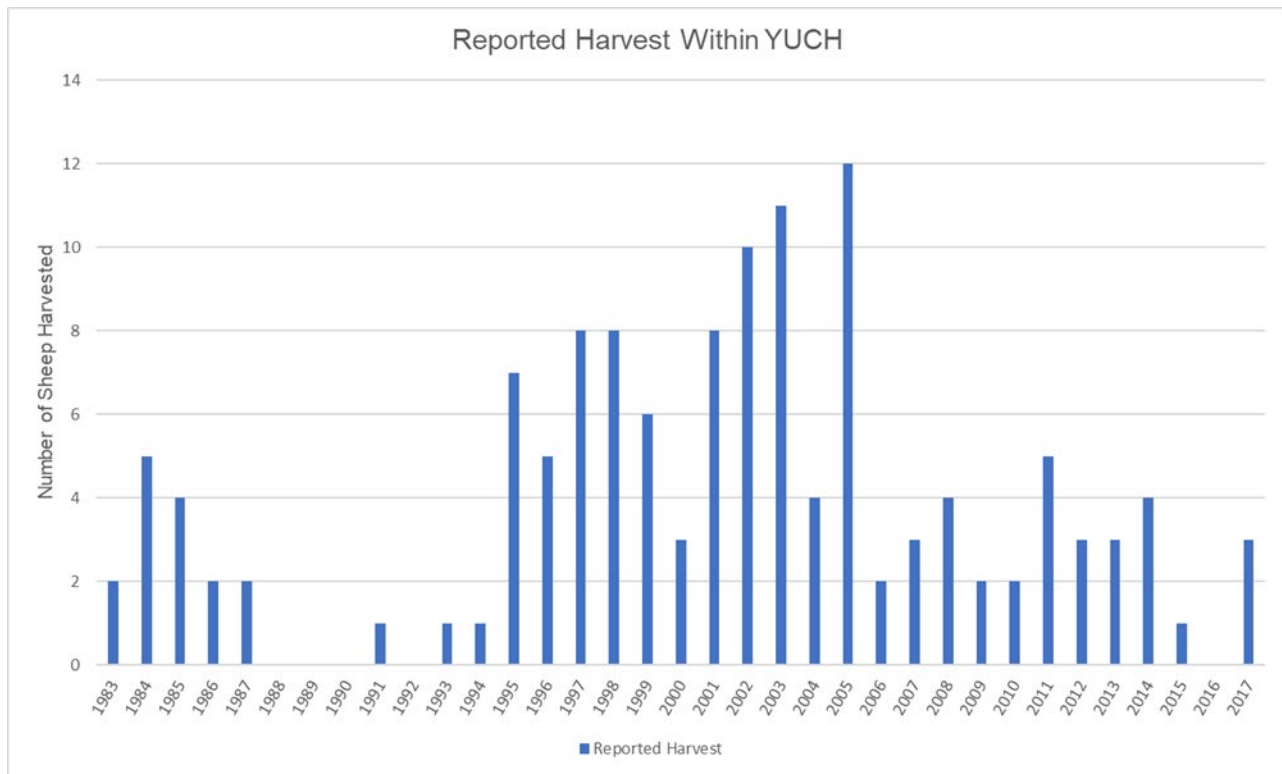


Figure 4. Summary of sheep harvest for Yukon-Charley Rivers National Preserve (Joly et al. 2018)

Effects of the Proposal

If this Emergency Special Action is approved, all Federal lands within YUCH in Units 20E and 25C will be closed to the harvest of sheep to all users for the fall 2023 season. This would decrease opportunity for federally qualified subsistence users and for anyone hunting under State regulations as sheep would not be available for harvest on Federal public lands within this area. Federal lands within YUCH in Unit 25B will remain open, which will provide some subsistence opportunity. Individuals hunting under State regulations would still be able to harvest sheep on private and State lands within Units 20E and 25C. This closure of NPS lands could result in displacement of hunters onto these State-managed lands.

Approval of WSA23-05, may aid in the recovery of the local sheep abundance by increasing the survival of the few remaining mature rams in the area and increasing reproductive success by maintaining a healthy number of rams across the population. The sheep population within YUCH is naturally small and isolated from larger population sources, which reduces recovery opportunities through migration. Major declines in abundance in small populations may compromise population viability (Caughley 1994). The latest survey revealed a dramatic population reduction from the long-term average and is now below 25% of the long-term average. Conservation of the remaining sheep populations will aid in faster recovery and reduce risk of localized extinction. While sheep will still be hunted on State-managed lands, the Board only has authority to affect sheep hunting on Federal public lands.

OSM CONCLUSION

Support Emergency Wildlife Special Action WSA23-05.

Justification

Population viability concerns warrant closure to sheep hunting on Federal public lands within YUCH in Units 20E and 25C by all users under §816(b) of ANILCA. The sheep population within YUCH is naturally small and isolated, making it more susceptible to extinction during large population declines. The abundance of sheep in the six survey areas within Units 20E and 25C has dropped 67% since the 2018 survey and is 77% below the long-term average of 313 sheep. Only two legal rams were observed across YUCH during the 2023 survey effort. While harvest assessments appear to be low (estimated to an average of 1.4 rams per year between 2018–2022) no harvestable surplus of sheep appears to exist in this population and any additional mortality could extend the duration of recovery or risk localized extinction. Sheep abundance in the Ogilvie mountains survey area in Unit 25B has declined 28% since the 2018 survey. This survey area has not declined as drastically as the six survey areas in Units 20E and 25C and should not be included in this targeted closure for population. Approving WSA23-05 will target the areas of concern and may help sheep abundance recover within Units 20E and 25C.

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INTERAGENCY STAFF COMMITTEE RECOMMENDATION

The Interagency Staff Committee recommendation is to **support** emergency special action request WSA23-05.

Justification

It is evident from the data presented in the analysis for WSA23-05 that the sheep population on Federal public lands within Yukon-Charley Rivers National Preserve (YUCH) in Units 20E and 25C is in serious decline. The most recent survey in the core areas within YUCH was conducted during July 18th – 20th 2023. The abundance of sheep in the six survey areas within Units 20E and 25C declined 67% since the 2018 survey and is 77% below the long-term average of 313 sheep. The survey areas with smaller populations, experienced the largest declines (93%) when compared to the long-term average. For the first time, no sheep were observed in two of the survey areas, the Dimond Fork Mountain and Copper Mountain survey areas. The minimum count survey observed only two legal rams across all survey areas. Due to high overwinter mortality, coupled with low recruitment rates, no harvestable surplus of sheep appears to exist in this population. Any additional mortality could prevent recovery or risk localized extinction, especially since the sheep population within YUCH is naturally small and isolated, making it more susceptible to extirpation during large population declines. This closure within YUCH is needed to ensure the continued viability of the sheep population, as described in §816(b) of ANILCA.

Unit 25B is not included in this closure request, as sheep abundance in the Ogilvie Mountains survey area has declined only 28% since the 2018 survey. Further, only 27% of lands within Unit 20E are Federal and of those, only 21% are NPS-managed lands, and in Unit 25C, only 9% are NPS-managed lands. Given the relatively small percentage of NPS lands in Units 20E and 25C, this targeted Emergency Special Action request still leaves opportunities for sheep hunting in the remaining state and Federal lands of Units 20E and 25C.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS



THE STATE
of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

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MEMORANDUM

TO: Anthony Christianson, Chair
Federal Subsistence Board

DATE: 8/3/2023

PHONE: (907) 267-2190

FROM: Ben Mulligan 
Deputy Commissioner

SUBJECT: Wildlife Special
Action WSA23-05

The Alaska Department of Fish and Game (ADF&G) has reviewed Wildlife Special Action WSA23-05 requesting the closure of all sheep hunting within the YUCH in State Game Management Units 20E and 25C, under the provisions of 816(b) of ANILCA and under 50 CFR 100.19(a) and **OPPOSES** this special action.

Although ADF&G recognizes and agrees that the Dall sheep population in the Tanana uplands within the Yukon-Charley Rivers National Preserve (YUCH) has declined, likely as a result of weather, the current population size does not constitute "...an emergency situation..." which would necessitate a closure "...to ensure the continued viability of a fish or wildlife population...." Furthermore, the assertion by the Office of Subsistence Management (OSM) that the "*Adoption of WSA23-05 may aid in the recovery of these local sheep abundance by increasing the survival of full-curl rams, which could have cascading, positive effects on the overall sheep numbers in this area by increasing ewe fecundity, lamb production, and survival of younger rams*" is not supported by scientific studies nor by peer reviewed scientific literature.

The claims in the OSM analysis are supposition at best and are not supported by the scientific evidence on population dynamics in harvested populations, including mountain sheep. The primary case study on intensive harvest of mountain sheep (Coltman et al. 2003) does not support the OSM analysis, and interestingly suggests the opposite effect to that in the OSM analysis. On Ram Mountain, harvest was numerically greater than in the YUCH on a population smaller than the YUCH which resulted in an approximately doubling in abundance. The core issue raised by Coltman et al. (2003) was the decrease in the relative frequency of a phenotype (rams with long horns) not negative impacts to abundance.

Dall's sheep in YUCH are managed using the full-curl ram harvest management strategy. The full-curl strategy is a conservative strategy because it delays harvest of rams until they are among the older age classes. Because rams aged 8 years old or older, have higher mortality rates than younger rams (Deevey 1947), we know that the full-curl strategy is a mostly compensatory harvest strategy. Furthermore, this harvest management strategy is self-regulating and sustainable, regardless of population size. As evident from harvest data during 2018–2022, in which annual harvest averaged 1.4 rams per year (range 0–3 rams harvested per year) within YUCH.

It is also worth noting that there was no consultation with ADF&G prior to the submission of this special action.

Cc: Ryan Scott, Acting Director, Division of Wildlife Conservation
Caroline Brown, Acting Operations Manager, Subsistence Section
Cheryl Brooking, Assistant Attorney General, Department of Law

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