



June 8, 2020

Public Comments Processing  
Attn: FWS-NWRS-2020-0013  
U.S. Fish & Wildlife Service  
5275 Leesburg Pike  
MS-PRB/PERMA (JAO)  
Falls Church, VA 22041-3803

Dear USFWS:

On behalf of the Wild Sheep Foundation (WSF), please accept this comment letter on the Proposed Regulation by the Arctic National Wildlife Refuge (ANWR) to Protect Dall's Sheep. WSF supports this proposed regulation. The regulation is based on the ANWR Revised Comprehensive Conservation Plan (approved 2015), directing that "domestic sheep, goats, and camelids are not allowed on the Arctic Refuge (Chapter 2, 2.4 12.9 Disease Prevention and Control)". The promulgated 50 CFR 36.39 (k) ANWR regulation fulfills and follows up on that 2015 planning directive, and should be supported.

For evidence in support of the regulation, we refer to the *Risk Assessment on the Use of South American Camelids for Backcountry Trekking in British Columbia* (2017). British Columbia's Ministry of Forests, Lands, Natural Resources Operations, and Rural Development contracted the Centre for Coastal Health in 2017 to update a previous disease risk assessment on South American camelids [SACs] (e.g., llamas, alpacas). The Alaska Department of Fish and Game assisted the project with funding. Based on this most recent and comprehensive published risk assessment, South American camelids can serve as host to at least 7 pathogens that could potentially impact wild sheep. Thinhorn sheep, such as Dall's sheep, are generally immunologically naïve to many pathogens compared to bighorn sheep in the lower 48 states. While some of these pathogens may not be commonly found in SACs, there is very little evidence on their presence or prevalence in SACs, and precaution around contact between the species was advised until a better understanding of risk could be developed. The relative vulnerability of Dall's sheep to respiratory pathogens/challenges has no doubt played a significant role in regulations developed in recent years by Alaska's Board of Game and the Alaska Region of the National Park Service.

WSF, and other organizations, have repeatedly called for well-designed experiments and pathogen surveillance programs to specifically test/assess llamas and other camelids that are used (recreationally or commercially) in occupied wild sheep range. Out of an abundance of caution, and given the uncertainty of which pathogens camelids may carry, the CCH 2017 assessment concluded (highlighting added):

***...there is high uncertainty about the probability of pathogen transmission from SACs to wild ungulates. We found no peer-reviewed publications documenting pathogen transmission from camelids to wild ungulates or to domestic sheep and goats for the identified pathogens. However, because there was almost no research examining the shedding and transmission dynamics for pathogens in camelid herds, or between camelids and other ruminants, a lack of peer-reviewed evidence should not be considered proof that transmission has not, or could not, occur.***

***Overall, we assessed the composite disease risk posed to wild ungulates by SACs accessing backcountry areas as medium-high with medium associated uncertainty. This assessment was driven primarily by the high impact and the medium-high risk posed by the respiratory pathogens *M. haemolytica* and *Pasteurella* spp., the medium-high***

*risk posed by CE, and the medium risk posed by Johne's Disease. Mitigation could be undertaken to partially reduce risk posed by respiratory pathogens, although mitigation for CE and Johne's Disease is much more challenging.*

*It is important to note that over time, new pathogens might emerge in SACs that create significant new risk not discussed in this report. In particular, risk would increase significantly if SACs are documented to be susceptible to infection with *Mycoplasma ovipneumoniae* (*M. ovipneumoniae*) or *Mycoplasma conjunctivae* (*M. conjunctivae*).*

*Uncertainty surrounding the probability of disease transmission from SACs to wild ungulates as a result of camelid trekking activities in BCs backcountry could be reduced with more research into prevalence and transmission dynamics for identified pathogens in llamas and alpacas; and into SAC health status and movements, with particular focus on SAC herds used for trekking in BC.*

***Until more information is available, banning camelids from key wild ungulate habitat is the most effective risk reduction strategy. However, where access is permitted, careful diagnostic screening for pathogens of concern and mitigation activities might be beneficial in partially reducing risk.***

Much like the North American Pack Goat Association (NAPgA) <https://www.napga.org/> has done, including a collaborative August 2018 workshop with WSF/wild sheep representatives, it would be beneficial if individual or collective llama packers or their associations worked with other stakeholders on development of comprehensive standardized health assessment guidelines and implementation of a comprehensive testing protocol. In fact, NAPgA has developed a set of Best Management Practices <https://www.napga.org/resources/best-management-practices-psr/> that pack goat users should, and do, adopt and implement. In addition, NAPgA has developed a popular-format training video <https://www.napga.org/bmp-video/> that pack goat users voluntarily watch; perhaps the llama packers associations could duplicate these approaches, customized for their animals. Furthermore, WSF and associated wild sheep representatives helped NAPgA develop a Health Passport that assists small ruminant veterinarians or other veterinary practitioners as they conduct health inspections/assessments of pack goats to be used recreationally.

In conclusion, for the safety, benefit, conservation, and future management of Dall's sheep in Alaska and specifically on ANWR, the USFWS should move forward with implementation of this proposed regulation. The Wild Sheep Foundation and the Alaska Wild Sheep Foundation stand ready to assist the USFWS and other federal land managers. Thank you for proposing this reasoned, and reasonable, approach. We look forward to further involvement with this issue, on ANWR, and elsewhere in wild sheep range in North America.

Sincerely,



Kevin Hurley  
Vice-President for Conservation & Operations

cc: Gray N. Thornton, WSF President & CEO  
Dr. Peregrine Wolff, WSF Chair  
WSF Conservation Staff  
WSF Professional Resource Advisory Board  
Kevin Kehoe, Alaska WSF President