

Alaska Wild Sheep Foundation  
13845 Mainsail Drive  
Anchorage, AK 99516

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Alaska Department of Fish and Game  
Boards Support Section  
P.O. Box 115526  
Juneau, AK 99811

We respectfully ask the Alaska Board of Game to reconsider our Statewide Proposal 64 (previously 90) with the following amended language:

**Proposal 64 – 5 AAC 92.029. Permit for possessing live game.** Eliminate domestic sheep (*Ovis aries*) and goats (*Capra hircus*) from the “Clean List” and require a permit for possession.

(b) The following species, not including a hybrid of a game animal and a species listed in this subsection, may be possessed, imported, exported, bought, sold, or traded without a permit from the department but may not be released into the wild:

Common Name	Scientific Name
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Sheep	<i>Ovis aries</i>
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Goat	<i>Capra hircus</i>
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In reference to this list, the following action is also outlined in regulation,

(i) The board will remove a species from the list in (b) of this section, if there is a preponderance of evidence that the species

...

(3) is capable of causing a significant reduction in the population of a species that is indigenous to Alaska;

(4) is capable of transmitting a disease to a species that is indigenous to Alaska;

(5) otherwise presents a threat to the health or population of a species that is indigenous to Alaska;

...

**What is the issue you would like to the board to address and why?** Per regulation 5 AAC 92.029, we ask the board to address whether domestic sheep and goats in Alaska are capable of causing a significant reduction, capable of transmitting a disease to, and whether they present a threat to Alaska’s Dall sheep, Rocky Mountain goats, and muskoxen.

Until the Caprinae specific pathogen *Mycoplasma ovipneumoniae* (*M. ovi*) is eliminated from Alaskan domestic sheep and goats, domestic sheep and goats present a potentially catastrophic health risk to wild Caprinae species within the State of Alaska. It is a proven fact that *M. ovi* can be transmitted to wild Caprinae, directly leading to widespread bronchopneumonia, death, and/or low lamb/kid survival for many years.

**Scientific References** – The preponderance of evidence supports the removal of domestic sheep and goats from the Clean List as evidenced by the following references as they relate to specific regulatory criteria:

**(3) “Capable of causing a significant reduction in the population of a species that is indigenous to Alaska;”**

If “*M. ovipneumoniae* were to be introduced into these populations, significant morbidity and mortality could result.” Alaskan “...wild sheep and goats are free of and believed to have very low resistance to many domestic livestock diseases. Furthermore, any diseases that are introduced could be spread widely throughout the large contiguous ranges of Dall’s sheep and mountain goats that occur in Alaska.” “Management alternatives to reduce the impacts of respiratory disease on wild sheep are limited. There is currently no effective vaccine or treatment...”

(Zarnke and Rosendal 1989, Serologic Survey for *Mycoplasma ovipneumoniae* in Free-ranging Dall Sheep (*Ovis dalli*) in Alaska, J. Wild. Dis. 25(4):612-613; Reducing Disease Risk to Dall's Sheep and Mountain Goats from Domestic Livestock - Position Statement The Alaska Chapter of the Wildlife Society, The Wildlife Society & American Association of Wildlife Veterinarians Joint Issue Statement Domestic Sheep and Goats Disease Transmission Risk to Wild Sheep )

**(4) “Capable of transmitting a disease to a species that is indigenous to Alaska”**

Transmission of *M. ovi* resulting in pneumonia followed by significant mortality has been scientifically documented in Dall sheep, Rocky Mountain goats and muskoxen.

Black et. al. 1988, An epizootic of *Mycoplasma ovipneumoniae* infection in captive Dall's sheep (*Ovis dalli dalli*), J. Wild. Dis., Oct. 24(4):627-35; Handeland et. al. 2015, *Mycoplasma ovipneumoniae* - A Primary Cause of Severe Pneumonia Epizootics in the Norwegian Muskox (*Ovibos moschatus*) Population, PLoS ONE 9(9): e106116. doi:10.1371/journal.pone.0106116; Anderson et. al. 2016, *Mycoplasma ovipneumoniae* detection in pneumonic mountain goat kids with transmission to sympatric bighorn sheep, 65<sup>th</sup> Annual International Conference of the Wildlife Disease Association)

**(5) “Presents a threat to the health or population of a species that is indigenous to Alaska”**

Pathogen transmission has already been recognized in Alaska given the implementation of hunting regulations prohibiting the use of domestic sheep and goats as pack animals for hunting (2013). Additionally, the National Park Service compendiums statewide (2015-16) prohibit any domestic sheep or goats within NPS areas in Alaska. According to the Disease Management Venture of the Western Association of Fish and Wildlife Agencies, “The DMV accepts that *Mycoplasma ovipneumoniae* (*M. ovi*) is a primary causative agent driving epidemic respiratory disease (i.e. pneumonia) in wild sheep... Initial spillover of *M. ovi* occurs via contact with domestic sheep or goats (which commonly carry *M. ovi* without experiencing signs of disease), and can subsequently be circulated within and between populations by wild sheep or mountain goats.”

(Alaska State Hunting Regulations 2013-2018; National Park Service, Superintendent’s compendium 2015 Wrangell-St. Elias National Park and Preserve; The Disease Management Venture, a working group of the Western Association of Fish & Wildlife Agencies (WAFWA), January 2017 Strategy paper)

As evidenced above the preponderance of the scientific evidence clearly shows that the requirements for removal of domestic sheep and goats from the Alaska Clean List have been met. This in itself provides the Board of Game with justification to act.

Regulation 5 AAC 92.029 was clearly established to protect wildlife from the threats posed by domestic animals. While managing domestic animals may be outside the purview of the Board of Game, this regulation is part of a valuable check and balance system that enables those responsible for wildlife to make a strong statement that changes must occur within the livestock community to protect Alaskan wildlife from the threat of foreign disease.

Although we firmly believe that the criteria for removal from the Clean List have been met, our goal is the protection of Alaska Caprinae from the threat of *M. ovi*. In fact once an *M.ovi* free status has been achieved in the State, then the basic premise for removal from the Clean List would no longer apply and domestic sheep and goats could remain on the List.

Our desire is to work collaboratively with domestic owners and producers to achieve an *M. ovi* free status and to modify the existing import regulations to maintain that disease free status while minimizing the impact on domestic owners. In fact AK WSF has offered to pay for the testing, replacement of infected animals and incidental expenses associated with making this happen to preclude any financial burden on the domestic owners. In this way we can continue to protect wildlife and still allow for the continuation of the traditional hobby and occupation associated with domestic sheep and goats.

What we believe is required to achieve an *M. ovi*-free State:

- ✓ Universal testing of domestic sheep and goats
- ✓ Replacement, quarantine or export of infected animals
- ✓ Changing rules on the import of domestic sheep and goats to require *M.ovi* free
- ✓ Monitoring program established by the State Vet
- ✓ Compensation to producers to off-set expenses for testing and replacement (AK WSF)
- ✓ Estimated to cost as much as a half-million dollars to complete – paid by AK WSF

Although we have worked diligently with the Alaska Farm Bureau and other domestic sheep and goat representatives over the last two years we have been unable to make significant progress on this problem due primarily to the lack of agreement on a solution. We do commend the efforts of the Farm Bureau, State Vet, and domestic owners in their testing of domestic animals. This testing effort verified the presence of *M. ovi* in our domestic population and confirmed a relatively low infection rate. This testing has proven that the threat is present and the relatively low prevalence rate makes an *M. ovi*-free state more achievable.

We sincerely hope the Board of Game will join us in making a definite statement that we need to act now in a collaborative way to prevent the transmission of a harmful pathogen that could result in a catastrophic die off of Dall sheep, Rocky Mountain goats, and muskoxen.