

FISH & WILDLIFE COMMISSION AGENDA ITEM COVER SHEET

Meeting Date: August 11, 2016

Agenda Item: Bighorn Sheep Health Update

Division: Wildlife

Action Needed: Informational

Time Needed on Agenda for this Presentation: 45 Min

Respiratory disease is important in the historical decline of bighorn sheep populations in the United States, and poses a serious challenge to restoration efforts. Extensive work within the scientific community has focused on identifying primary pathogens and their role in respiratory disease. To date, this work has found:

- [1] Many herds infected with the key respiratory pathogens,
- [2] Many of these pathogens cause chronic infection,
- [3] Our detection of these pathogens is imperfect, and
- [4] No/limited immunity to new strains of the same pathogen should they be introduced to the herd. All of this work points to serious risks involved with translocating bighorn across the landscape.

Translocated animals and resident animals alike carry distinct suites of organisms that might include multiple bacterial strains, viruses and parasites. In some cases these organisms have the potential to compromise the health of translocated and/or resident bighorn at the release sites. We now have evidence of numerous translocation failures when respiratory disease is involved, both in Montana and throughout the West. This can result in a net loss of money and compromise bighorn conservation.

The wildlife health lab would like to provide an update on the current science regarding bighorn sheep respiratory disease, and summarize results from the first year of bighorn sheep and mountain goat monitoring in Montana.