
Appendix H:

Working Group D - Payette Principles

[The eight "Payette Principles" were reviewed by Working Group D. The following text was prepared and supported by the participants in Working Group D:]

Working Group D – April 26, 2007, Respiratory Disease in Mountain Sheep: Knowledge Gaps and Future Research. Davis, California

We believe these are factors that affect or influence BHS health:

- 1a) Scientific observation and field studies demonstrate that "contact" between domestic sheep and bighorn sheep is possible under range conditions. This contact increases¹ risk of subsequent bighorn sheep mortality and reduced recruitment, primarily due to respiratory disease.
- 1b) The complete range of mechanisms/causal agents that lead to epizootic disease events cannot be conclusively proven at this point.
- 1c) Given the previous two statements, it is prudent to undertake management to prevent contact between these species.
- 2) Not all bighorn sheep epizootic disease events can be attributed to contact with domestic sheep.
- 3) Gregarious behavior of bighorn sheep and domestic sheep may exacerbate potential for disease introduction and transmission.
- 4) Dispersal, migratory, and exploratory behaviors of individual bighorn sheep traveling between populations may exacerbate potential for disease introductions and transmission.
- 5) There are factors (e.g., translocation, habitat improvement, harvest, weather, nutrition, fire, interspecies competition, and predation), some that can be managed and some that cannot, that can influence bighorn sheep population viability.
- 6) Pasteurellaceae, other bacteria, viruses, and other agents may occur in healthy, free-ranging bighorn sheep.

Working Group D Feedback:

#1b. Change "cannot be proven" to "have not been identified/defined/delimited in all cases."

#5. Number 5 seems a little bit out of order (but it needs to remain in the list!). Perhaps swap with #6

#6. Delete "may"

¹ Refer to the concern that this should read "can increase risk..."; Payette Science Panel Summary, page 12, 2nd paragraph under comments 38 and 40.