
APPROACHES INITIATED TO GAIN INSIGHT INTO RESPIRATORY DISEASE IN MONTANA'S BIGHORN SHEEP HERDS

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Respiratory disease is a major limiting factor in the restoration, conservation, and management of bighorn sheep in Montana and throughout western North America. Despite many decades of research there is a limited understanding of the disease process, with proactive management to minimize disease primarily limited to establishing policies to minimize exposure of bighorn sheep to domestic sheep. In the past decade, however, there have been significant advances in understanding the pathogens involved in bighorn sheep pneumonia that have resulted in the development of new sampling and testing methodologies that promise to advance our understanding of the disease. This presentation will review the general ideas regarding the pathogens and the disease process advanced by leading researchers of bighorn sheep pneumonia and describe how these ideas are being combined with recent sampling and testing advances and incorporated into Montana's state-wide bighorn sheep research program. We will also describe the collaborations developed between our research team and other research teams addressing the same questions in neighboring states. These collaborations are an attempt to build a regional initiative that combines the resources, expertise, and unique management histories of bighorn herds in other states. We think such open communication and coordination of research activities will help us advance our understanding of bighorn sheep pneumonia and develop management strategies that can enhance restoration of the species.