

MONITORING DISEASE IN THE ROCKY MOUNTAIN BIGHORN

by

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Abstract

Management of disease in big game populations requires an adequate assessment of the condition of free-ranging animals. Many of the basic blood parameters are not specific for disease processes and reflect only general physiological adaptation to stress. The seromuroid proteins were evaluated as more specific correlates of inflammatory reactions to parasitism. These proteins were useful in detecting changes in parasite activity, however, they did not reflect the size or number of inactive lesions. Reactivation of lungworms during the vernal rise of larval output resulted in the stimulation of an inflammatory reaction mediated by an antibody similar to that causing hay fever or food allergies in man. In areas where trapping operations are conducted, seromuroid analysis may be a useful tool in studying the host response to parasitism.