

EFFECT OF A MINERAL DRENCH ON YEARLING BISON HEALTH AND PERFORMANCE

Researchers.

Dr. Jeff Martin, South Dakota State University

Dr. Tom Bragg, Turner Institute of Ecoagriculture

Dr. Robert Sager, Medicine Creek Bovine Health Solutions and Consulting

Rationale. Morbidity and mortality of bison associated with outbreaks of *Mycoplasma bovis* has increased in prevalence, severity, and impact in recent years, leading to growing research broadly focused on cause, early detection, transmission, pathology, management, and treatment of the disease in bison. In addition to concerns about animal welfare, many bison producers have suffered significant economic loss, including at the Institute's McGinley Ranch. Much is unknown about this disease in bison. There is some limited information that an oral mineral drench supplement of cobalt, zinc, selenium, and copper improves the health and performance of yearling beef cattle, thus we proactively administered this drench to yearling bison at McGinley Ranch to assess effects on weight gain, parasite loads, other disease titers in blood serum, and herd response (e.g., infection rate) to any unplanned mycoplasma event that might occur by chance over the course of the study. If proven effective this mineral drench could be a relatively inexpensive proactive treatment to reduce the severity of a mycoplasma outbreak or improve health and performance in yearling bison.