
CULLING AS AN EXPLORATORY FIELD TECHNIQUE TO REDUCE OVERALL MORTALITY DURING A PASTURELLA SPP. OUTBREAK IN A MONTANA BIGHORN SHEEP POPULATION

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Several herds of Rocky Mountain bighorn sheep (*Ovis Canadensis*) in the United States and Canada have experienced all-age die-offs during outbreaks of *Pasturella* spp. induced pneumonia. Isolating triggers and remedies for these die-offs remains elusive. Montana Fish, Wildlife and Parks used the statewide Draft Sheep Conservation Strategy as a guide in establishing a field culling-mobile laboratory-media response to a pneumonia/complex outbreak in the East Fork Bitterroot bighorn sheep herd. Montana Fish, Wildlife and Parks employees along with volunteers from the Ravalli County Fish and Wildlife Association, Wild Sheep Foundation and the USDA Forest Service culled 76 sheep from a herd numbering at least 187 animals according to spring 2009 aerial observations. Field personnel discovered six recent bighorn sheep carcasses when culling efforts began in late November. Field personnel discovered one additional bighorn carcass during the three-month culling process. Lab experts conducting onsite necropsies observed evidence of infection in 73 (96%) of the culled sheep. State biologists observed 93 bighorns on this winter range during a cursory aerial survey conducted on 28 December 2009. Preliminary observations from comparing results of sheep selected for culling to field necropsies suggest field personnel detect infected sheep with a high degree of accuracy. We suggest that this technique prevented additional mortalities directly related to pneumonia.