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## THE MOUNTAIN UNGULATE RESEARCH INITIATIVE: A COLLABORATIVE EFFORT TO ADVANCE UNDERSTANDING OF BIGHORN SHEEP AND MOUNTAIN GOAT ECOLOGY

Robert A. Garrett,\* Fish and Wildlife Management Program, Ecology Department, Montana State University, 310 Lewis Hall, Bozeman, Montana 59717, rgarrott@montana.edu

P.J. White, National Park Service, Yellowstone Center for Resources, P.O. Box 168, Yellowstone National Park, Wyoming 82190, pj\_white@nps.gov

Jay J. Rotella, Fish and Wildlife Management Program, Ecology Department, Montana State University, 310 Lewis Hall, Bozeman, Montana 59717, rotella@montana.edu

Bighorn sheep (*Ovis canadensis*) and mountain goats (*Oreamnos americanus*) are important components of the faunal assemblage of Montana's mountainous ecosystems representing high-profile large mammals that garner substantial public interest. While population restoration, augmentation, and introductions have traditionally been the predominant conservation activities associated with these species in Montana, basic ecological research has been limited. A new research initiative has been developed and funded to study bighorn sheep and mountain goat spatial and population ecology in a number of ecological settings within the Greater Yellowstone Ecosystem. The aspiration of the collaborators is to develop a long-term research program that could expand to other populations of these species in Montana if we are successful. Primary objectives of the studies include 1) understanding the ecological interactions between sympatric populations, 2) developing and refining habitat suitability models, 3) documenting spatial dynamics within and among populations and identifying important movement corridors, 4) collecting vital rate data to better understand population dynamics, and 5) investigating potential responses of bighorn sheep and mountain goats to gradual changes in the regional climate. The presentation will describe the collaboration and ongoing efforts to consolidate all available data on bighorn sheep and mountain goats in the GYE. These data are used to describe mountain goat range expansion within the GYE over the past half century and to conduct initial habitat modeling efforts. We will also describe our plans for initiating field studies in the near future.