

---

## **\*\*GRIZZLY BEAR USE OF FOREST SERVICE GRAZING ALLOTMENTS IN THE GREATER YELLOWSTONE ECOSYSTEM (POSTER)**

Smith L. Wells\*, Animal and Range Sciences Department, Montana State University, Bozeman,  
Lance B. McNew, Animal and Range Sciences Department, Montana State University, Bozeman  
Daniel B. Tyers, U.S. Forest Service, Northern Rocky Mountain Science Center, Bozeman, MT

Range expansion of the Greater Yellowstone Ecosystem (GYE) grizzly bear (*Ursus arctos*) population has led to increased human-bear conflicts, including livestock depredation. In 2015, we began a study to evaluate spatio-temporal patterns between public land livestock grazing, grizzly bear habitat use and livestock depredations. In collaboration with the U.S. Forest Service and the Interagency Grizzly Bear Study Team, we will obtain 25 years (1989-2014) of data related to Forest Service grazing allotments, including livestock stocking and on-off dates, locations of individual collared bears, grizzly bear depredations and management removals, bear density and habitat characteristics pertinent to bear space use (e.g. landcover, elevation, human activity) within the GYE. Bear and conflict locations will be related to allotment information, habitat characteristics, and bear density using generalized linear models to evaluate what factors are influencing grizzly bear space use and depredation events, and how they have changed across seasons and years. Habitat selection by individual bears will be evaluated at two scales, home range selection within the landscape and selection within the home range, to give more insight into factors affecting space use and how they differ among individual bears. Our results should facilitate the development of adaptive approaches to conserve grizzly bears while also conserving the economic viability of livestock operations, and should have utility for bear and land management in the GYE.