

# CONSERVATION GRAZING MANAGEMENT

by Justin Derner, David Augustine, and Bill Lauenroth

Conservation grazing management, conservation grazing for short, is a new direction for rangeland management that emphasizes the positive relationships between domestic livestock and conservation goals. Rangeland management has traditionally emphasized sustainability of rangelands for livestock production while conservation has focused on protecting native plant and animal species. While many rangeland managers may feel that they have always practiced “conservation grazing”, the approach has not been widespread and importantly it has not been clearly articulated to and recognized by the conservation community. As evidence of this, one only has to sample some of the negative comments that have been written in the past about the relationship between livestock grazing and conservation in the West. Although some of these comments may be objectively attributed to biases against the western livestock industry, many are based on credible evidence of documented damage to wildlife habitats as a result of poor rangeland management practices. The aim of conservation grazing is to help rangeland managers blend the objectives of a livestock grazing enterprise with site and landscape scale needs of species of concern to conservationists. Accomplishing this blending of objectives will require collaboration between rangeland managers and conservationists within an adaptive management framework.

Careful analysis makes clear that the shared concerns of livestock operators and conservationists with respect to many of the emergent issues of the 21st century such as sage grouse

habitat, prairie dogs, energy development, and invasive weeds far outweigh the potential conflicts. Conservation grazing focuses on and highlights these shared concerns. Land managers can utilize livestock to shape rangeland vegetation through manipulation of behavior (timing, frequency and intensity of use; distribution; herding; supplemental feed), season of grazing, and type of animal (cow-calf, yearling, sheep, goats, horses). Combining livestock grazing and other natural disturbances such as fire, drought and cyclical populations of prairie dogs, provides a variety of options in the toolbox for resource managers to simultaneously address habitat needs of species of concern and livestock production.

Conservation grazing must be outcome-based rather than practice-driven, and conducted within the context of landscapes through collaborative efforts involving diverse stakeholders. For example, ranchers and public-land managers in sagebrush rangelands of Wyoming are currently facing challenges associated with cheatgrass invasion, sage grouse habitat, mountain plover habitat, prairie dog populations, energy development, pocket gophers, and effects of global warming including likely warmer and drier future environments. Past management approaches have addressed these challenges mostly at the scale of individual pastures, ranches, or allotments, with practices that have often been isolated in application (e.g., application of the herbicide Plateau to control cheatgrass) and either on private or public lands, but not both due to administrative and approval logistics. As an





alternative, we suggest that conservation grazing provides the potential, through shared objectives among diverse stakeholders, to address these challenges within the larger landscape framework by involving ranchers; conservation groups; industry; organizations; local, state and federal governmental agencies that have a common interest in outcomes. Determining outcomes is essential to the coordinated effort in which decisions about how vegetation structure, composition and productivity may need to be altered. These outcomes can be achieved across administrative and land ownership boundaries through open and honest communications, shared vision, effective planning, and collective participation in the application of integrated management approaches and subsequent monitoring efforts.

The application of conservation grazing management to large landscapes will require that we identify integrated management approaches that must be determined by our understanding of rangelands and of critical habitat areas for different species of concern. The current patchwork approaches that are most common encountered are not effective at managing large landscapes for a suite of desired goods and services demanded by a society with diverse interests in

rangelands. The success of conservation grazing will largely be measured by its ability to overcome the constraints and prevailing dogma associated with traditional management practices and their application in a cookbook and cookie-cutter manner (e.g., a one-size fits all approach). Employing integrated approaches to landscapes that combine natural disturbances and utilize economically viable livestock management to manipulate vegetation to enhance wildlife habitat and minimize the effects of invasive weeds, offer great promise to solve future management problems.

*Justin Derner and David Augustine are rangeland researchers with the USDA Agricultural Research Service in Cheyenne, Wyoming and Fort Collins, Colorado. Bill Lauenroth is a professor in the Botany Department at the University of Wyoming. Justin, David, and Bill are involved in conservation grazing management research in Great Plains grasslands. This current work focuses on mountain plovers, prairie dogs, and fire. They are interested in extending this work into the sagebrush rangelands of Wyoming. Bill is also offering a seminar on Conservation Grazing at the University of Wyoming this spring.*