Collaborative adaptive management attempts to bridge the science-management divide through a process of science-based, participatory rangeland management research.

The CARM project began in 2012 and is planned for 10 years. Pastures were stocked in 2013 for baseline data collection and treatments began in 2014.

Wildlife Objectives:
- A: Maintain populations of McCown’s longspur, Western meadowlark and horned lark
- B: Increase populations of grasshopper sparrow, Cassin’s sparrow, Brewer’s sparrow, lark bunting and mountain plover
- C: Maintain control of prairie dog populations

Vegetation Objectives:
- A: Increase percentage of cool season grasses and non-shrubby plants by weight and number of plants
- B: Increase variation in vegetation structure, composition and density within and among pastures
- C: Maintain or increase size of four-wing saltbush and winterfat shrubs

Profitable Ranching Objectives:
- A: Maintain or increase livestock weight gain
- B: Reduce economic impact of drought
- C: Maintain or reduce operating costs

Grazing management influences diet quality and selection of cattle, and alters vegetation structure across the landscape.

Landscape heterogeneity in vegetation structure determines the distribution, abundance and nest-site selection of the grassland birds.

Participatory rangeland research is an opportunity to build trust and understanding among diverse stakeholders.

Multi-disciplinary collaborations enhance collaborative adaptive rangeland management processes that address social-ecological management objectives.

Social-Ecological System

Multiple Rangeland Objectives

Multi-disciplinary contributions from young scientists and mentors in animal, social and wildlife sciences evaluate outcomes of CARM vs. TRM treatments and decision-making processes.