Color Country Adaptive Resources Management (CCARM) Sage-grouse Local Working Group

The Color Country Adaptive Resource Management (CCARM) Sage-grouse Local Working Group (LWG) is facilitated by Nicki Frey. The main purpose of the LWG is to provide a framework of strategies and associated actions that can be implemented to abate threats, address information gaps, and guide monitoring efforts. Strategies developed by CCARM were designed to be specific to the local area while taking into consideration the guidelines at a range wide level.

Technicians capturing an unsuspecting sage-grouse that will soon be wearing a radio-transmitter. These transmitters provide the LWG with important habitat-use information to guide management project development. Photo by Todd Black.

Description of Area and General Population Information

The Panguitch Sage-grouse Management Area (SGMA) is located in southern Utah, in Kane, Garfield, Paiute, and Wayne Counties, incorporating more than a dozen, often connected leks. Due to the population exchange throughout this Management Area, and its incorporation of the southern-most sage-grouse lek, it is considered an important population for Utah.

This population uses a series of leks throughout the habitat area, with some males visiting more than one lek per season. The population is distributed north-south in a series of linked valleys and benches, and constrained by mountains and canyons. There is a large range in the number of males in attendance among these leks. Movement of sage-grouse from one valley or bench to another among seasons is necessary to meet their seasonal habitat requirements in the highly variable annual weather conditions of this region. Movements among valleys are not present in each group of sage-grouse, and not all used areas are known to managers.

Recent Activities and Accomplishments

The CCARM continues to be active in sage-grouse research, management, and communicating issues with the group. In cooperation with Dr. Nicki Frey, CCARM has been conducting satellite telemetry research in the Panguitch SGMA since 2013. In 2017, this research expanded to include Buckskin and Bear Valleys, to determine their connectivity to the Bald Hills SGMA and to neighboring Dog Valley. The preliminary data highlights possible travel corridors among Dog/Buckskin/and Bear Valleys, seasonal movement patterns and studied female nesting locations and success.

CCARM partners Utah Division of Wildlife Resources (UDWR) and Utah State University (USU) advised a Master's of Natural Resource Student to analyze data from the last 4 years, to determine the resource selection of Greater sage-grouse in the Panguitch SGMA as it pertains to

the use of habitat treatments in the area. The research determined that female sage-grouse prefer these treated areas rather than any native habitat, throughout the brood-rearing season, as well as during other times of the year. Males were not as reliant on these treated areas, and used a variety of native shrub habitats throughout the year.   The resulting manuscript will be published online shortly, and has already been distributed amongst the managers working with the Panguitch SGMA.

In addition to data analysis, the partners developed and administered a survey to a random sample of residents within the Panguitch SGMA boundary to determine the level of understanding and awareness residents had regarding sage-grouse distribution and ecology, Watershed Restoration Treatments, and general land management in their local area. The results are intended to highlight areas of information in which the Watershed Restoration Initiative and UDWR need to focus their outreach, education, and communication. The results of this survey were presented to the CCARM and SWARM local working groups. It is currently being drafted for publication within the USU Extension system and will be publically available.

Upcoming Year Work Plan

The CCARM will revise its local plan during 2018. Additionally, the group plans to learn more about sage-grouse responses to habitat improvement projects.