Rich County Sage-Grouse Research Field Update—April 2016

Project Title: Greater Sage-grouse Responses to Livestock Grazing in the Rich Sage-grouse Management Area.

Purpose and Background: The US Fish and Wildlife Service acknowledged that its September 2015 decision to not list the greater sage-grouse for protection under the Endangered Species Act was largely because of the collaborative efforts by federal and state agencies, and private landowners to mitigate species conservation threats. Although, livestock grazing in occupied sage-grouse habitats was not identified as a range wide species threat, the Bureau of Land Management (BLM) and the U.S. Forest Service (USFS), per their amended Resource Management and Land Use plans, will review all public lands grazing allotments to determine if contemporary rangeland vegetation conditions achieve recommended guidelines for sage-grouse habitat. Of particular interest are public grazing allotments designated Sagebrush Focus Area (SFAs). My research will provide scientific data to develop and refine guidelines regarding grazing practices in sage-grouse habitat.

Methods: Currently, I am capturing and radio-marking female sage-grouse that we will be monitoring during the breeding season (March) through the brood rearing season (July) until chicks have fledged. I will mark 58 sage-grouse, 40 with very high frequency (VHF) necklace-style radio collars, and 18 with global positioning system (GPS) rump-mounted transmitters. The GPS backpacks will collect 6 locations per day and transmit the data automatically via satellite. I will use this data and compare it to data collected from GPS marked cattle on Deseret Land and Livestock ranch and the Sage Creek BLM allotment to determine behavioral responses.

I will measure the vegetation/habitat characteristic at nest and brood sites, and random locations. This data will be used to determine habitat preferences of nesting and brooding sage-grouse. This data will also be compared to vegetation samples collected in high and low cattle grazing areas to determine if grazing livestock alter sage-grouse habitat-use.

Current status: We are currently capturing and radio-marking sage-grouse as well as conducting morning lek counts. Prior to the start of the field season I had 22 female sage-grouse fitted with VHF radio-collars that survived the winter. Additionally, we were able to deploy 6 GPS backpacks last summer and fall. As of this update, we have deployed a total of 35 VHF radio-collar and 15 GPS transmitters. I have 3 GPS and 5 VHF yet to deploy. We have not detected any nesting attempts of the radio-marked sage-grouse to date.

I would like to thank landowners, the Rich CRM, and the community at large for their support. Everyone that I have come in contact with has been welcoming and helpful especially those that pulled me out of the snow drift. Thank you.

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