

Dr. Nicole Frey

End of year report

A21151

We deployed 10 radio-collars at the study site in 2010. Two undergraduate researchers tracked the radio-collars at least twice a week through September 2010. After 2010, grouse were tracked once a week. The following is a report of the summer fieldwork. A detailed report will be provided containing detailed analysis when the research project is completed.

During the summer of 2010 we have been researching the Greater Sage Grouse in Alton, UT. The study began by capturing and placing radio collars on several birds near Hoyt's Ranch and then we commenced tracking the movement of the sage grouse using radio telemetry. We initially sought to get a reading on each bird two times each week, starting near the Grouse's breeding grounds (a lek) and then observing a general trend in movement.

The majority of the grouse were male, but there were two females that had successfully bred and nested. Two nests were found, both containing several eggs. All 8 of the Sage Grouse being tracked remained near the lek for approximately two months and then began to gradually move in a southward direction toward the town of Alton. The two females did not move from their nests until the eggs had hatched. When the eggs did hatch, the females slowly made their way south also, along with their chicks. One nest was observed to have 6 out of 7 eggs hatch and the other nest had 4 out of 6 eggs hatch.

As the grouse moved south of Alton, it became more difficult to track them and a few were missing and dead. About four of the birds were consistently tracked throughout the summer. Two of the birds would always stick together and were often among a group of 7-9 other grouse. This large flock was tracked consistently and remained near an area, which was treated to mimic their ideal habitat. The two birds that were collared were essential to locate, as they would lead us to this large flock. However, toward the end of the summer one of these grouse had lost the collar, which was found with another collar from a previous study. Luckily with the loss of this bird, there was another that could lead us to the large flock. Multiple hens were sighted during this season with chicks. It was exciting to see that the future of this population looked optimistic.

In summary, there were initially 8 birds in our study, as well as one from a previous study, that we were able to track. However, toward the end of summer, the number of birds that we consistently found dwindled to four, and two others had died. Sadly one of the four birds at the end of the summer had lost its collar or died as well. Yet we were able to track a large

flock, which helped to conclude that the birds moved, generally, in a southward direction after mating earlier in the year.