

## **West Box Elder Sage Grouse – May 19, 2015**

### **Project- Greater Sage-grouse Response to Conifer Removal in the Box Elder Sage-grouse Management Area**

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#### **Purpose:**

I am trying to determine how the on-going conifer removal program in the Park Valley area of the Box Elder Sage-grouse Management Area may be affecting greater sage-grouse vital rates (survival, nest success, brood success). To do this I have captured and marked both male and female sage-grouse with very high frequency (VHF) radio-collars. To date I am tracking 40 sage-grouse (32 females, 8 males) through the breeding, nesting, and brood rearing (and in the winter via radio-telemetry flights) seasons. I am documenting if sage-grouse survival and success or failure differ by the types of habitats they use. I will also be doing pellet transects, and looking for sage-grouse pellets as additional evidence of their use of sagebrush habitats, habitats encroached by conifers, and habitat where conifers have been removed by bull hogging, lop and scatter, and chaining.

#### **Breeding:**

Some of my radio-marked males (particularly in the southern region) have already moved up to their summer range. However, as of May 18<sup>th</sup>, strutting males were still observed on some leks. I expect that my remaining males will be moving to their summer ranges (typically in the mountains) within a month.

#### **Nesting:**

As of May 19<sup>th</sup>, I had 23 hens initiate nests. Of these, 5 nests were predated (one hen died), 1 abandoned, 6 are incubating, and 11 have hatched. One hen has lost her brood (the cause is unknown, but suspected to be predation) and rejoined a flock of other females without chicks. One of the hens that had her nest predated has initiated a second nest (this is VERY rare in WBE). Two nests were initiated during the week of May 11 – not incredibly late, but getting toward the end of my “expected” initiation season. I am hopeful that the recent rains may prompt some of the remaining 10 hens to nest, now that there will be “green groceries”.

#### **Brooding:**

As mentioned earlier, 11 hens have/had broods, but I suspect we have lost one brood. Hens with broods have made very small movements away from their nest sites, and are generally found in the same area. Recent rains have prompted a green-up, and I don't believe hens with chicks are currently seeking mesic areas for forbs – they are abundant across the study area. As the spring/summer wears on, I expect to see hens moving to mesic areas, as well as up in elevation to cooler summer range.

**Special Notes:**

It appears that hens immediately recognize conifer removal areas as usable habitat. I have flushed random hens in treatments, and a couple of my technicians regularly record radio-marked birds in treatment areas. Many of the treatment areas that are used have been treated within the last 3 (or so) years, including one which completed in the second week of May.

One hen nested in an ongoing mastication project, and hatched. This is promising data, and has been submitted as a "field note" to a few scientific journals, in an effort to address U.S. Fish and Wildlife assumptions that treatments are not readily used by sage-grouse.

**Landowners:**

I certainly appreciate the cooperation, support, and interest of local landowners in my project and this on-going research. We understand that we are guests, and I constantly remind my technicians of the same thing. If you have any issues, please contact me. If you would like an update about your land specifically, don't hesitate to call; ideally, my technicians or I will keep you in the loop if we cross paths.

I am truly thankful for everyone's help!

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