

STATE OF NEVADA SAGEBRUSH ECOSYSTEM TECHNICAL TEAM 201 South Roop Street, Suite 101 Carson City, Nevada 89701-5247 Phone (775) 684-8600 - Fax (775) 684-8604

Minutes for the SETT and the

# **SCIENCE WORK GROUP**

## Thursday September 19, 2013 1:30 p.m. Desert Research Institute Campus 2215 Raggio Parkway, Reno, Nevada 89512 Conference Center Room Stout A

## 1. INTRODUCTIONS

Adam Watts welcomed us to DRI and introduced our new facilitator, Tamara Wall, also from DRI. Those in attendance were: John Copeland, Melissa Faigeles, Beth Leger, Barry Perryman, Matt Maples, Co-Chair Tony Wasley, Kelly McGowan, Brad Schultz, Kent McAdoo, Thad Heater, Jim Sedinger, Shawn Espinosa, Louis Provencher, Sherman Swanson, Jack Sengl, Bill Longland, Sandra Brewer, John Tull, Adam Watts, Tina Nappe, Steve Abele, Jen Newmark, Marc Pitchford, Bruce Jones, Ted Koch; by phone were Pete Coates and Mike Casazza.

## 2. GROUND RULES FOR MEETINGS

Facilitator Tamara Wall displayed an organizational matrix showing her as the facilitator, Tim Rubald as the recorder, SETT as listeners, and the scientists are advisors. Ground rules were then discussed and determined for this meeting:

1. Start and end on time - Tamara

2. In order for a topic to be discussed it must be on the agenda in advance – Tim Rubald

- 3. Attack ideas, not people Tamara
- 4. Be willing to agree to disagree Tamara

Also on the organizational matrix, anticipated outcomes were added. It was initially determined that today's anticipated outcome was prioritizing threats and actions to achieve goals.

## 3. RANKING OF THREATS TO GREATER SAGE GROUSE (GSG)

A. Tim Rubald and Kelly McGowan provided background on the threats and how they are currently ranked in the 2012 Strategic Plan for Conservation of Greater Sage grouse in Nevada (2012 State Plan) and in the 2013 Greater Sage-grouse Conservation Objectives:

Final Report (COT Report). Pertinent handouts were provided to the group regarding both of these documents that were discussed.

B. Jim Sedinger presented some slides representing some of his work on what threats might be most important to the sage grouse. He discussed the variation in sage grouse survival regarding his work in Eureka County. He referred to the 2000 guidelines that show the bird prefer higher level of sagebrush cover. He also discussed nest survival rates in various surveys he studied along a power line construction corridor where ravens increased as it was being built. He stated that nest success for the bird was completely uncorrelated to ravens in this area. He also mentioned the predation factor is not universally clear. From his data on this study, there is a strong drought effect on females. He suggested the group focus on the commonality of the factors and noted the birds appear to respond to the affect of rain on the landscape, not rain itself.

He pointed out the riparian zones and the importance of them with late brood rearing sites that produced young. He stated that you can preserve all the sagebrush in the world but without the riparian areas they won't survive.

Jim led a discussion regarding how fire impacts lek areas. He noted that in his studies, 5km buffers from leks don't cover the brood rearing areas, suggesting that the buffers need to be larger. Sage grouse hens have a fidelity to their nests even if they are in areas that have burned. He noted that what drives chick survival the first 45 days is the availability of food and varies by precipitation.

From this discussion, the group chose to prioritize the order in which to address the threats. They agreed that they should work from five pertinent threats. Tamara passed out sticky notes and asked all participants to write a threat on each of five sticky notes they were provided. They were then asked to post their notes on a large paper hung on a wall.

After a short break, Tamara led the group in a short discussion of the results of their exercise. The following threats were noted:

- 1. Fire
- 2. Invasives/weeds
- 3. Riparian loss
- 4. PJ encroachment
- 5. Energy
- 6. Grazing horses, cattle, and sheep
- 7. Climate variability/change

Considerable discussion followed the listing of threats. Following are some of the comments made in the discussion:

Ranking of threats will facilitate management activities. It also brings up that there are a lot of interactions when variable aren't' present. It was noted there are too many interacting variables.

Rather than wildfire as a threat, it's a vector for invasive grasses and loss of cover which changes the distribution of the grouse in larger spatial scales. Fire is the enabling mechanism. The mosaic of fire is a positive in the life stages of the grouse; it's the annual grasses that invade after fire that's the threat.

Ravens are attracted to edges of fire so predation becomes an issue after fire.

The status of the plant community when hit by fire is an issue. if it doesn't have the native perennial understory then there is no resistance or resilience. That sets the area up for cheatgrass or other invasives to move in.

It was noted that at the rate sagebrush has been burning, that we could have an entire grassland in 20-30 years.

It was suggested to approach the fire issue 'from the oblique'. The threats are all interrelated, so what are the top four or five things we can do right now? This method of approaching the issue would allow us to know what should be done. Management actions combine all the threats since they are all interrelated. It was thought that we would be farther down the road that way because otherwise we will begin discussing why this is a threat. Many of the group agreed to this line of thinking.

Considerable discussion ensued regarding how to address the threats. It was noted that doing an analysis by life cycle of the grouse, and applying the threats to each specific life cycle could provide good information. Also discussed was taking each threat and applying it to the life cycles.

A question came up as to whether or not there is enough research available to do this. Indications are there is more detail available than what has been discussed to date.

It was determined through consensus that the next meeting topic would be wildfire and invasives as it affects different portions of the life cycle – specifically nesting and brood rearing since those appear to be the nexus on recruitment.

#### 4. TOPICS FOR FUTURE MEETINGS

A. Wildfire and invasives as it affects nesting and brood rearing.

#### 5. DATE/LOCATION OF NEXT MEETING

A. October 3rd – DRI Conference Center, Stout B

#### 6. ASSIGNMENTS AND DUE DATES

Pete Coates will provide the group an outline from the available literature specifying what the important threats are for nesting and brood rearing. DUE DATE – OCTOBER  $3^{RD}$ .

In an effort for the group to have something to react to, the SETT will brainstorm a short list of questions and have it distributed prior to the next meeting. DUE DATE – SEPTEMBER  $25^{TH}$ .

### 7. ADJOURNMENT

Meeting notes drafted and submitted by Tim Rubald.