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INTERNATIONAL SAGE-GROUSE FORUM - TRULY AN INTERNATIONAL EVENT

By Wildlife Management Institute

The International Sage-grouse Forum sponsored by the Jack H. Berryman Institute for Wildlife Damage Management at Utah State University (USU), the Utah Community-Based Conservation Program, state and federal management agencies, and industry was held in Salt Lake City, Utah, on November 13 and 14, 2014. The forum, conducted under the auspices of the Western Association of Fish and Wildlife Agencies (WAFWA), drew over 350 state, federal and local government officials; private landowners; industry representatives; conservation group members; and faculty and staff from numerous universities. In addition to the people in Salt Lake City, more than 200 others across the 11 state range of greater sage-grouse participated in the forum via video-conference.

The goal of the forum was to provide information on the current status of sage-grouse populations, conservation efforts, and the ongoing status review by the U.S. Fish and Wildlife Service (USFWS). The other important goal was to provide a venue for diverse interests to engage in meaningful dialog about efforts to preclude the need to list the species. A federal court has ordered the USFWS to issue a final decision by September 30, 2015, on whether or not to list greater sage-grouse under the Endangered Species Act.

The forum began each day with a plenary session. On the first day, San Stiver, WAFWA Sage Grouse Coordinator, and representatives of several states and the province of Saskatchewan provided overviews on the biology, status, and management of greater sage-grouse. USDA Forest Service Chief Tom Tidwell and Bureau of Land Management Assistant Director Ed Roberson described the coordinated, range-wide planning processes their agencies are pursuing to update forest management and land use plans to provide adequate regulatory mechanisms to protect sage-grouse habitat on federal lands, which cover two-thirds of the species' range.

Utah Governor Gary R. Herbert offered the perspective of the Western Governors' Association, encouraging the broad range of interests involved in use and management of the sagebrush landscape to continue working together to provide for both sage-grouse and a vibrant economy.

Continued on Page 4

IN THIS ISSUE

International Sage-grouse Forum – Who Participated and What They Thought

By Terry Messmer, Utah State University

The International Sage-grouse Forum was held in Salt Lake City, Utah, on November 13 and 14, 2014. The forum drew over 350 state, federal and local government officials; private landowners; industry representatives; conservation group members; and faculty and staff from numerous universities. In addition to the people in Salt Lake City, more than 200 others across the 11 state range of greater sage-grouse participated in the forum via video-conference. Since the forum, over 100 more participants have registered to receive and view the recorded proceedings.

The last range-wide forum on sage-grouse was held in 2005 in Reno, Nevada. To evaluate if the 2014 forum achieved its goals of providing information and a dialogue on the current status of sage-grouse populations, conservation efforts and the science behind the ongoing status review by the U.S. Fish and Wildlife Service (USFWS), the Utah Community-based Conservation Program surveyed participants to learn more about who they were and what they thought about the forum. This information will be important should the forum sponsors decide to conduct additional events.

Based on the information provided by those who registered to attend the event on-site, most of the participants were representatives of state and federal agencies (Figure 1). This pattern was similar to those who registered to participate on-line or registered to receive the recorded proceedings (Figure 2).

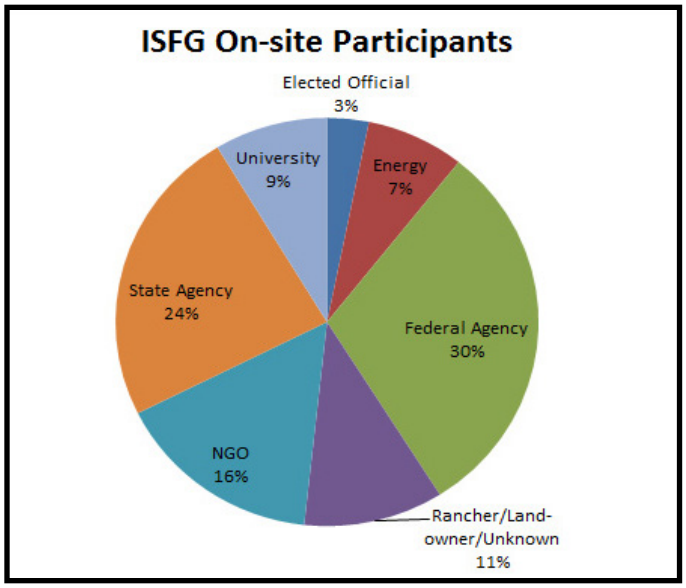

Figure 1. Demographics of Forum On-site Participants.

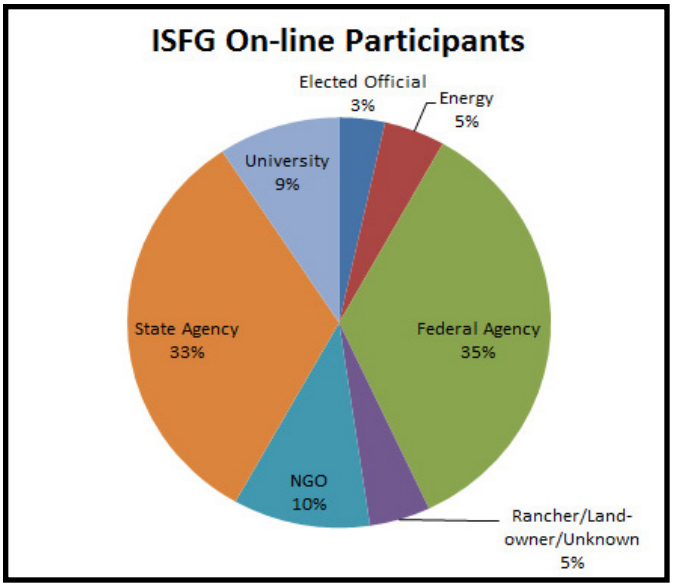

Figure 2. Demographics of On-line Participants.

We asked the participants to rate the usefulness of the information using a scale of 1-3, with 3 being the most useful (Figure 3). Participants rated the sessions on predation and hunting, science-to-solutions, and basic biology, as being the most useful. Participants also were asked to identify which sessions provided new information. The predation and hunting and basic biology sessions received the highest ratings.

All of the respondents to the survey expressed a high level of satisfaction with the forum, with over 65% stating they were very satisfied. In particular, they were very appreciative of the mix of topics and speakers. Most respondents liked the idea of reoccurring sessions so that they could participate in each session. Many expressed an interest in increasing the 2 hour time period allotted for each session to allow for more questions and interaction with the panelists. Several respondents stressed the need for more information about on-the-ground research, handouts to support the presentations, and more importantly - when is the next Forum. Over 95% of the participants expressed an interest in attending a future forum.

We also wanted to learn what might be included in future forums to enhance the overall educational and information experiences. The topics which predominated in the responses included; how to create collaboration, how to cope with politics, conflict resolution, facilitation, local working group sustainability, predation management, more information on state and local conservation plan implementation, landowner issues (habitat management, grazing, CCAA, best management practices), balancing energy and sage-grouse conservation, balancing recreation and sage-grouse conservation, managing invasive weeds, disease mitigation, and monitoring sage-grouse response to conservation actions.

Continued on Page 3

Who Participated and What They Thought, cont.

The Forum evaluations will be summarized and presented to the Western Association of Fish and Wildlife Agencies Grater Sage-grouse Executive Oversight Committee for use in planning future Forums.

Question	Not useful	Good	Excellent	Total Responses	Mean
Basic Sage-grouse Biology and Management	1	10	11	22	2.45
Sagebrush and Sage-grouse Landscape Management – Minimums and Maximums	1	36	12	49	2.22
SGI Science to Solutions: Sage-grouse conservation through Sustainable Ranching	1	20	20	41	2.46
Approaches to Mitigation	6	41	10	57	2.07
Predation and Hunting: Lightning Rods and Silver Bullets	0	25	26	51	2.51
Strategic Conservation Planning for Private Lands	1	18	16	35	2.43
New Breakthroughs in Fire and Invasive Weed Management	5	23	9	37	2.11
Defining Development, Disturbance, Fragmentation, and Habitat Loss: Understanding and Mitigating the Effects of the Anthropogenic Activities on Sage-grouse	1	33	19	53	2.34
State and Province Plans Digested: In-depth Discussion	4	27	7	38	2.08
Local Working Group Facilitator Coordination	0	13	5	18	2.28

Figure 3. Usefulness of information presented in workshop.

Research update: Mothers Know Best: New Insights from Long-Term Sage-grouse Research on Parker Mountain

By David Dahlgren, Utah State University Extension Associate

New published research results suggest that the old saying of "fathers know best" does not apply to sage-grouse. The research confirms that biologically male sage-grouse contribute relatively little to the overall population. Females produce the young and select the nest and brood sites that provide resources and protection for the next generation. Caudill et al. (2014) analyzed the factors which influenced reproductive effort and success for female sage-grouse at Parker Mountain. They looked at both climatic variables as well as reproductive trade-offs, in other words how previous efforts to produce successful nests and broods influenced the fate of subsequent attempts.

The study included data collected by USU Extension from 1998-2010. Radio-marked females were monitored annually throughout the reproductive cycle from April to August. Nest initiation, nest success, brood success, and recruitment were recorded. Nest initiation occurred when a hen attempted to lay eggs in a nest bowl. Nest success was defined as at least one egg hatching from the nest. Brood success was defined as at least one chick in a brood surviving to 50 days or more. And recruitment referred to the number of chicks which lived to become part of the fall population.

In this study, nest success was positively associated with spring snowpack levels and brood success was positively influenced by April precipitation. These two factors typically contributed to producing more green plants or in the case of both hens and chicks - the groceries. There were also interesting trade-offs based on the female's past reproductive experience. For instance, if a hen had a successful brood in year 1, she was less likely to have a successful nest in year 2. Furthermore, if a hen had a successful nest in year 1 she was less likely to have a successful brood in year 2. So, for some females there were hidden costs associated with being successful. However, if a hen had a successful brood in year 1 and a successful nest in year 2 she was highly likely to have a successful brood in year 2.

The take home message is this; there are reproductive trade-offs for sage-grouse females in any population. If they were successful at one reproductive process they may be unsuccessful at other subsequent parts of the process. However, there were some individual females that just seem to get it right – were successful throughout their lives at both nesting and raising chicks. These were our super star hens, if you will, the "Super Moms." They truly lived the "Mother Knows Best" mantra. The Utah Plan for Sage-grouse Conservation embodies this knowledge in that it was designed to increase the available habitat space and the green groceries needed to raise, keep, and provide for more "super hens."

Citation: Caudill, D., M. R. Guttery, B. Bibles, T. A. Messmer, G. Caudill, E. Leone, D. K. Dahlgren, and R. Chi. 2014. Effects of climatic variation and reproductive trade-offs vary by measure of reproductive effort in greater sage-grouse. Ecosphere 5(12):154. This peer-reviewed published article can be accessed at: http://dx.doi.org/10.1890/ES14-00124.1.

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If it's not good for communities, it's not good for wildlife.

International Sage-grouse Forum, cont.

Noreen Walsh, USFWS' Mountain-Prairie Regional Director, described the process the USFWS will use to reach its final listing decision. She also addressed concerns about the relationship between the USFWS' decision earlier in that week to list the Gunnison sage-grouse as "threatened" and the implications for greater sage-grouse. Walsh assured the Forum participants that the Gunnison sage-grouse decision did not imply a similar outcome for greater sage-grouse was inevitable. To the contrary, Walsh said, the final decision to list the Gunnison sage-grouse as threatened rather than endangered as originally proposed demonstrated the value of pre-listing efforts to conserve species. She concluded by expressing USFWS leaderships' hope that the collective efforts of the conservation community, landowners and industry across the range of greater sage-grouse would be sufficient to make listing unnecessary.

Plenary speakers on the 14th included Jason Weller, Chief of the Natural Resources Conservation Service; Virgil Moore, Director of the Idaho Department of Fish and Game and chair of the multi-agency Sage Grouse Executive Oversight Committee; and Lee Cornwell, a 3rd generation rancher and President of Cornwell/Langen Ranches in northeast Montana. In addition to being an active cow-calf operation, the Cornwell/Langen Ranches provide extensive habitat for greater sage-grouse and other sagebrush-dependent species that is protected in perpetuity through a conservation easement with The Nature Conservancy. The focus of this plenary session was the value and importance of working private lands to the welfare of sage-grouse.

Afternoons during the forum were dedicated to a series of workshops covering a broad range of topics from basic sage-grouse biology and management to ways to mitigate the impacts of development. Others addressed the workings of the Sage Grouse Initiative and other approaches to blending sustainable ranching with sage-grouse conservation and recent developments in management of fire and invasive species. One workshop explored changes in state management of sage-grouse harvest over the past three decades and the effects of anthropogenic food and nesting "subsidies" on raven predation of sage-grouse. Ravens are one of the main predators of sage-grouse nests and their numbers have increased exponentially across the West in recent years. Landfills, road kill and certain crops provide an artificial abundance of food, while transmission line and cell phone towers create ideal nesting sites for ravens. When these features enhance the landscape for ravens, they can reach densities that have an adverse impact on sage-grouse productivity. Efforts to reduce raven numbers through direct, lethal control have had some temporary, localized effect but discussion during the workshop identified the need to find ways to address the underlying causes of raven population growth by reducing availability of artificial food sources and redesigning tall structures to make them less functional as nesting platforms.

Because of the high level of interest in the workshop topics, some sessions were repeated on the second day of the forum to increase the opportunity for participants to join in multiple conversations. The plenary sessions and workshops were recorded and are now posted on the conference website http://www.sage-grouseforum.org/ to allow stakeholders continuing access to the forum discussions.

Utah's Community-Based Conservation Program Mission

Utah's Community-Based Conservation Program is dedicated to promoting natural resource management education and facilitating cooperation between local communities and natural resource management organizations and agencies.

This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Kenneth L. White, Vice President for Extension and Agriculture, Utah State University.

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