

International Sage-grouse Forum (ISGF)
(www.sage-grouseforum.org)

Conservation Through Science, Management and Community Involvement

Purpose: To enhance sage-grouse conservation through science, management and community involvement. At no time in the recorded annals of wildlife management, have so many devoted so much to the management and conservation of a single species – the Greater Sage-grouse. The species is indicative of the health of the sagebrush ecosystem on which many depend. The ISGF will highlight the magnitude and resolve of on-going range wide partnerships, and identify opportunities to further advance species conservation through science, management, and local community involvement.

When: November 13-14, 2014. The Forum will begin at 8:00 am, Thursday, November 13 and conclude at 4:00pm, Friday November 14th, 2014

Where: Radisson Inn Downtown, 215 West South Temple, Salt Lake City, UT. 84101, US
A block of rooms has been reserved under Sage-grouse Forum.

Who: Landowners, local sage-grouse working group members, federal, state, and private sage-grouse conservation partners, industry, elected officials, county and community planners.

Registration: to register for the ISGF go to www.sage-grouseforum.org
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Workshop Session Title – Defining Development, Disturbance, Fragmentation, and Habitat Loss: Understanding and Mitigating the Effects of the Anthropogenic Activities on Sage-grouse

Date: Friday November 14, 2014

Time: 8:00-10:00 am

Purpose: To review and discuss the terminology and assumptions used to describe and quantify the potential effects of anthropogenic activities on sage-grouse populations and habitat use. Specifically speakers will discuss what is known regarding the effects of energy development, power lines, and ancillary roads on sage-grouse populations and the effectiveness of mitigation measures and changes in technology to ameliorate potential effects.

Format: Short presentations followed by facilitated discussion

Facilitator: Michele Straube

Speakers:

1. **Greater sage-grouse response to energy development and related ancillary activities in sagebrush ecosystems** - Dr. Jeffrey L. Beck is Associate Professor of Wildlife Habitat Restoration Ecology in the Department of Ecosystem Science and Management at the University of Wyoming. His research focuses on restoring the effectiveness of wildlife habitats in disturbed rangelands, particularly sagebrush habitats, where Dr. Beck and his students seek to link habitat conditions with population processes. Specifically, this research increases the understanding of direct and indirect impacts of anthropogenic disturbance on vertebrate species, and the efficacy of mitigation techniques and conservation practices intended to enhance conditions in sagebrush habitats.

Contact Information: Dr. Jeff Beck, Department of Ecosystem Science and Management University of Wyoming, Agriculture Building 2005, Department #3354, 1000 E. University Ave. Laramie, WY 82071. Phone: 307-766-6683: E-mail: jlbeck@uwyo.edu.

2. **Oil and gas impacts on Wyoming's sage-grouse: summarizing the past and predicting the foreseeable future** – Mr. Nick Owens is a Senior Regulatory Analyst for Anadarko Petroleum. He will discuss technological advances over the past 10 years that have dramatically shifted drilling technology from vertical well bores to directional and horizontal well bores. Both technological changes in how oil and gas wells are drilled and protective regulatory mechanisms and policies that have been developed since the 2010 U.S. Fish and Wildlife Service sage-grouse listing decision, suggest that future oil and gas impacts to sage-grouse will be reduced from former predictions. Mr. Owens is responsible for addressing high-level wildlife and endangered species concerns across Anadarko's North American assets, including the Gulf of Mexico. He has a B.S. degree in biology from Eastern Illinois University and has 10 years' experience supporting large-scale energy infrastructure development projects throughout the United States.

Contact Information: Mr. Nick Owens, Anadarko Petroleum, 1099 18th Street, Denver CO 80202, P.O. Box 173779, Denver CO 80217. Phone: 720-929-6878: Fax: 720-929-7878E-mail: nick.owens@anadarko.com.

3. **Mitigation effectiveness for improving nest success of greater sage-grouse influenced by energy development** - Chris Kirol is a research biologist at Big Horn Environmental Consultants based in Sheridan, Wyoming. He also works as a research assistant for the Dr. Jeffrey L. Beck lab (University of Wyoming). Mr. Kirol received his B.S. and M.S. from the University of Wyoming. His research explored the question: Does on-site mitigation result in measurable reductions of impacts of oil and gas development on resident sage-grouse? Specifically, this research was designed to test the implications of on-site mitigation practices on sage-grouse nest success in a natural gas field in the Powder River Basin, Wyoming. Mr. Kirol has been involved in several research projects primarily focused on habitat use and fitness parameters of the

greater sage-grouse in human-altered landscapes and has over 10 years of experience in wildlife biology and research.

- 4. Greater sage-grouse nest and brood site selection and success relative to power lines** – Dr. Terry A. Messmer is a Professor and Extension Wildlife Specialist, Director Jack H. Berryman Institute for Wildlife Damage Management, Utah State University, Logan. He also the director of the Utah Community-Based Conservation Program at Utah State University. In North America electric transmission power lines were estimated have an ecological influence on 50% of all sagebrush within greater sage-grouse conservation areas. The construction, operation, and maintenance of power lines in sage-grouse habitats was identified as a conservation threat by the U.S. Fish and Wildlife Service in the decision to designate sage-grouse as a candidate species for protection under the Endangered Species Act of 1973. We mapped electric transmission and distribution power lines and ancillary roads located in sage-grouse habitats in Utah and used these maps to conduct viewshed analysis to determine if sage grouse nest and brood site selection and success, and brood movements recorded in Utah from 1998-2013 differed based on distance, visibility, and type of power line.

Contact Information: Dr. Terry A. Messmer, Professor and Extension Wildlife Specialist, UMC 5230, Utah State University, Logan, Utah 84322-5230. Phone: 435-797-3975; Fax: 435-797-3796; E-mail: terry.messmer@usu.edu.

- 5. Managing electric utility construction and operations to minimize risks to sage-grouse and other wildlife** – Sherry Liguori is Avian/Environmental Program Manager for Rocky Mountain Power/PacifiCorp, and is based out of Salt Lake City, UT. She is current Chair of the Avian Power Line Interaction Committee (APLIC) and was the project manager and primary author of *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*. She has 20 years of professional experience as an avian biologist, working for the New Jersey Endangered & Nongame Species Program, HawkWatch International, and PacifiCorp.

Contact Information: Sherry Liguori, Avian Program Manager, Rocky Mountain Power/Pacific Power, 1407 West North Temple, #120A, Salt Lake City, UT 84116 Phone: 801-220-4736; E-mail: sherry.liquori@rockymountainpower.net.