# **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 14<sup>th</sup>, 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 <u>www.sage-grouseforum.org</u>)

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# Workshop Session B. Sagebrush and Sage-grouse Landscape Management – Minimums and Maximums

**Purpose:** To uncover the science regarding the management of the sagebrush ecosystem for sage-grouse at the landscape level. This session will highlight aspects of the research completed and on-going as part of the SageSTEP, US Geological Survey (USGS), US Forest Service (USFS), Brigham Young University (BYU), and Utah State University (USU) on-going research efforts. SageSTEP is a long-term multidisciplinary experiment evaluating methods of sagebrush steppe restoration in the Great Basin. Sagebrush communities have been identified as one of the most threatened land types in North America, and as much as half of this land type has already been lost in the Great Basin. SageSTEP, USGS, USFS, USU, and BYU scientists are studying the effects of land management options to provide resource managers with improved information to make restoration management decisions with reduced risk and uncertainty.

Thursday, November 13, 2014

3:30 pm Concurrent Workshops - Sagebrush and Sage-grouse Landscape

Management – Minimums and Maximum (Steve Knick, Bruce Roundy, Francis Kilkenny,

Mark Brunson, Avery Cook)

# Friday, November 14

# 10:30 am Concurrent Workshops

 (Repeat, B) Sagebrush and Sage-grouse Landscape Management – Minimums and Maximum (Steve Knick, Bruce Roundy, Francis Kilkenny, Mark Brunson, and Avery Cook, )

Format: Short presentations followed by facilitated discussion

**Facilitator:** Dr. S. Nicole Frey, Utah State University

#### **Speakers:**

1. Modeling ecological minimum requirements for distribution of greater sage-grouse and responses of bird communities to restoration of woodland sites - Implications for population connectivity - Dr. Steven Knick, USGS Supervisory Research Ecologist. Dr. Knick's research in shrubsteppe systems in the Intermountain West has focused on the role of human and natural disturbance in shaping ecological systems; the effects of habitat fragmentation on passerine bird communities; resource selection by animals; the use of satellite imagery to determine landscape attributes of semi-arid regions. He will review recently published research that models greater sage-grouse minimum ecological requirements to sustain populations. He will also discuss sage-grouse and other sagebrush obligate bird responses to woodland management treatments.

Contact Information: Dr. Steven Knick, USGS, Biological Resources Division, Forest and Rangeland Ecosystem Science Center, Snake River Field Station, 970 Lusk Street, Boise, Idaho 83706. Email: <a href="mailto:steve\_knick@usgs.gov">steve\_knick@usgs.gov</a>; Office: 208-426-5208; Fax: 208-426-5210.

2. Pinyon-juniper encroachment and tree reduction effects on sagebrush and understory response - Dr. Bruce Roundy, BYU Professor. Dr. Roundy research projects include establishment ecology of weeds and native plants, vegetation disturbance thresholds for management of sagebrush systems, watershed responses to management practices, and increasing diversity of fire rehabilitation and other range seedings. He will discuss understory cover responses to Piñon-Juniper (PJ) treatments across gradients in the Great Basin. Piñon-Juniper encroachment into sagebrush habitats has been identified as a threat to sage-grouse conservation, He will review recently published research regarding the effects of management treatment in sagebrush-steppe ecosystems to control fuel loads in PJ, produced the most favorable vegetation response.

Contact Information: Dr. Bruce Roundy, BYU, 701 East University Parkway Drive, 4105 LSB, Provo, UT 84602. E-mail: <a href="mailto:Bruce Roundy@byu.edu">Bruce Roundy@byu.edu</a>: Phone: 801-422-8137.

3. Native sagebrush plant restoration for sage-grouse habitat – Dr. Francis Kilkenny is a USFS Research Biologist and lead of the Great Basin Native Plant Project, an interagency project between the BLM Plant Conservation Program and the USFS Rocky Mountain Research Station. His research interests include the ecological and evolutionary impacts of climate change on native and invasive plant species; the evolution of local adaptation in native and invasive plant species; pollination biology of herbaceous and long-lived clonal plants; evolutionary consequences of density and intraspecific competition; fundamental niche modeling and the projection of species range shifts due to climate change. He will discuss propagation methods for important sagebrush plants for sage grouse, effective seed mixes and seeding methodologies for sagebrush plant reproduction and large-scale production methods for growing sagebrush plant communities.

Contact Information: Dr. Francis Kilkenny, USFS, 322 E Front Street Suite 401, Boise, ID 83702, E-mail: ffkilkenny@fs.fed.us: Phone: 208-373-4376: Fax: 208-373-4391

**4. Factors influencing greater sage-grouse use of sites mechanically treated to remove conifers -** Mr. Avery Cook, Upland Game Project Leader, Utah Division of Wildlife Resources (UDWR). Annually, up to 90,000 ha of sage-grouse sagebrush habitat is estimated to be degraded by pinyon and juniper (PJ) encroachment. Greater sage-grouse population declines have been attributed PJ encroachment because sage-grouse may avoid otherwise suitable sagebrush habitat. Mr. Cook will discuss research completed to evaluate sage-grouse response to mechanical treatment to remove or reduce conifer cover (Juniper) in sagebrush/sage-grouse habitat.

Contact Information: Mr. Avery Cook – UDWR, 1594 West North Temple, Salt Lake City, Utah, 84116. E-mail: averycook@utah.gov: Office: 801-538-4794

**5. Stakeholder perceptions of sagebrush management** – Dr. Mark Brunson, USU Professor. Dr. Brunson conducts research on social aspects of management change in rangeland and forest systems, including public acceptability and knowledge regarding wildland ecosystems and their management, adoption of new practices by public and private land managers, and the connections between biophysical and socio-demographic changes. He will discuss research regarding public knowledge, perceptions, and acceptance of managing sagebrush ecosystems.

Dr. Mark Brunson, USU, Department of Environment and Society, 5215 Old Main Hill, Logan, Utah 84322-5215. E-mail: <a href="mark.brunson@usu.edu">mark.brunson@usu.edu</a>: Office: 435-797-2458.