The Future of Rangeland Fire
In A Changing World

Society for Range Management
66th Annual Meeting, Technical
Training & Trade Show
February 2-8, 2013
OUR COMMITMENT TO RANGELAND AND NATURAL AREA IMPROVEMENT IS STRONGER THAN EVER

With a brand portfolio of herbicides available to them, our Range & Pasture Specialists can help you find products to increase forage production, control brush or create wildlife habitat. These consultants can make recommendations based on your land and your needs.

For product information or to locate a Dow AgroSciences Sales Representative in your area, please visit www.RangeandPasture.com or contact our Customer Information Group at 1.800.263.1196.

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PastureGard® HL Herbicide
Remedy® Ultra Herbicide
Sendero™ Herbicide
Spike® 20P Herbicide
Surmount® Herbicide
Tordon® 22K Herbicide
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Dow AgroSciences

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Division of Agricultural Sciences
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Oklahoma Invasive
Plant Council

Tall Timbers Research Station &
Land Conservancy

Oklahoma Grazing Lands
Conservation Association

Great Plains Fire
Science Exchange

Natural Resources
Conservation Service
Welcome

It is with great pleasure that I welcome you to an event that can enlighten your understanding, improve your knowledge and maybe change your perspective and awareness of the vast rangelands of the United States and the world.

The week is filled with educational workshops and training sessions. There are technical presentations from world authorities on rangeland resource management where you can obtain the newest ideas.

At the trade show you will get to see the latest tools and techniques for assessing and measuring the various components of rangeland resources.

You are not too young or too old to find something of interest, from the high school youth forum, university student contests, to various university and agency meetings. There are several technical tours to choose from as well.

You will have a chance to spend time with old friends and meet new SRM members from around the world. There will be time to rest and relax at the “Oklahoma BBQ banquet,” dance and various social tours.

Gary Frasier
President, SRM
Welcome to Oklahoma City!

The Cox Convention Center is centrally located in Downtown Oklahoma City and is the primary location of the meetings, technical training and trade show. The convention center is near a hopping, newly-renovated area called “Bricktown” that allows you close access to hotels, restaurants, shopping, historic sites and entertainment. If you have extra time during your trip to OKC, be sure to visit some of our amazing and historical sites. Information is readily available at the OKC Convention and Visitors Bureau booth.

The 2013 OKC SRM annual meeting committee has worked diligently to bring you the best OKC and SRM have to offer! The week of activities will start with committee meetings, the first tour and an ESD session on Saturday. More meetings and trade show set-up on Sunday. The plenary session, “The Future of Rangeland Fire in A Changing World,” technical sessions, trade show, student activities, producer forum and tours will be on Monday, Tuesday and Wednesday. Thursday will offer the last of the technical sessions, an undergraduate ESD workshop and the last of a 4-day ESD collaborative interagency ESD training session, and will conclude on Friday with another tour.

We hope you enjoy your visit to Oklahoma!

Karen Hickman and Brian Northup
General Co-Chairs
**Important Information**

The majority of the 2013 SRM meeting is located in the Cox Convention Center. The CCC rooms are labeled **Meeting Room, Ballroom, Exhibit Hall** and **Native American Room**. Rooms labeled **Grand Avenue, Threadgill, Kingkade, Biltmore, Egbert, Lee** and **Huckins** are located in the Renaissance Hotel.

**Important Room Locations**

**Registration** - Cox Convention Center Lobby  
**Daily Trail Boss** - Meeting Room 21  
**Business Office** - Meeting Room 8

**Registration Hours**

Located in the Cox Convention Center Lobby  
**Saturday** - 3:00 - 7:00pm  
**Sunday** - 7:00am - 7:00pm  
**Monday - Wednesday** - 7:00am - 5:30pm  
**Thursday** - 7:00am - 12:00pm

**2013 Business Office**

The business office will be open to provide you with information from 7:00am - 6:00pm on Saturday, 8:00am - 6:00pm Sunday - Wednesday, 8:00am - 12:00pm on Thursday.

**Daily Trail Boss**

The Daily Trail Boss is printed every morning. News and pictures for the next issue must be submitted by 11:00am the previous day via email to dailytrailboss@rangelands.org

**Volunteers**

See message board for assignments. Check-in at the business office 1 hour prior to your shift.

**Message Board**

The board will be located near the registration desk. Recent information, lost and found, cancellations and more will be posted about the meeting.
Important Information

Tour Tickets
Check the registration desk for available tickets.

SRM Business Luncheon
Wednesday, 12:00pm - 2:00pm, Ballrooms C/D/E

Tour Buses
Tour buses will load near the front doors of the Cox Convention Center on the north side of the building on the east end near the OKC Convention and Visitors Bureau information desk. Meet 15 minutes prior to the tour.

Hungry?
Concessions can be purchased in the hallway outside the Exhibit Halls, Wednesday and Thursday.

SRM Past Presidents, Founding & Charter Member Luncheon
Monday, 12:00pm - 2:00pm, Kingkade.

Wild Women of Range
An informational gathering during the SRM meeting. We network and will “crown” the Wildest Woman of Range. Students, professionals and ranchers (especially women) are welcome.

Wireless Hotspots
Wireless hotspot areas can be found in various locations throughout the Cox Convention Center.

Speaker Preparation Room located in the Business Office

OKC Visitors & Convention Center Booth
Information about Oklahoma City can be found at their booth on the first floor of the Cox Convention Center.
The Future of Rangeland Fire
In A Changing World

Monday, 8:30 - 11:30am, Ballroom C.

The plenary theme addresses fire as a formative process on rangelands across the globe. Moderator Dale Rollins will reflect on the interaction of rangeland fire and humans through time.

Tom Swetnam, University of Arizona, a dendrochronologist known widely for his research on fire history and climate in the Western U.S., will speak about what we have learned, and are learning, about the role of climate variability and human land use on past and present fire regimes across elevation gradients and regions. Stephen Pyne, Arizona State University, the world’s leading wildland fire historian, will provide a historical survey of people, fire and herbivory that suggests what the future might hold for rangeland fire.

The second half of the program will feature David M.J.S. Bowman, University of Tasmania, Australia, exploring the role of fire in our discipline had fire been included in the early development of ecology. Sam Fuhlendorf, Oklahoma State University, will conclude the plenary session by arguing why fire should be a central tenet of rangeland ecology and management.
2013 Trade Show

Monday- 8:00am - 6:00pm  
Tuesday 7:00am - 6:00pm  
Exhibit Halls 1, 2, & A

Visit the trade show, where over 1,200 range practitioners will gather to share information on exciting new products and services!

Trade Show Mixer

Monday- 6:00pm - 8:00pm

Enjoy delicious appetizers while you socialize with other range management students, colleagues, producers and professionals at the 2013 trade show mixer. During the mixer, Oklahoma’s favorite young swing band will perform. The A-Bar Bunkhouse Band is a youthful western swing band hailing from the tallgrass country of northeastern Oklahoma. These four young men will wow you with their classic western swing tunes.

*Cash bar will be available

Hosted Coffee Breaks

Monday  
7:00 - 8:00am, 10:00 - 11:00am & 2:00 - 3:00pm  
Tuesday  
7:00 - 8:00am, 9:30 - 10:30am & 2:00 - 3:00pm  
*In the Trade Show*

8
SRM Silent Auction

“Cool, Clear Water” By: Kathy Winkler

The SRM Endowment Fund Development Committee will conduct the annual Silent Auction. The Endowment Fund supports SRM programs and operations. Bring your Silent Auction items to setup Sunday, 6:00pm in Hall A, 1. The Silent Auction runs from Monday 8:00am - Tuesday 4:30pm. Auction close-out and item pickup will occur Tuesday 4:30pm - 6:00pm. All items must be picked up Tuesday evening, no exceptions.

Tuesday, Feb. 5
Ballrooms C/D/E
8:00pm - 12:00am

Come enjoy fun and fellowship with your friends at the SRM. Bring your hat and be ready to dance to authentic Oklahoma music and some of your all-time favorites. The dance will be conveniently located at the Cox Convention Center.
Oklahoma BBQ Banquet

Enjoy an old-fashioned cowboy barbecue dinner while listening to our cowboy poet tell stories and share his music about the range. Chuck Milner is a singer/songwriter from Roger Mills County, Oklahoma and has been featured at several venues throughout his career.

Wednesday- President’s Reception 5:00 - 6:00pm, Banquet 6:00 - 9:30pm, Ballrooms C/D/E

*Cash bar will be available

Things To Do

Oklahoma City’s popular Bricktown entertainment district is host to SRM 2013. The Cox Convention Center is located in the heart of Bricktown and surrounded by many tourist attractions.

The Myriad Botanical Gardens is a destination within walking distance that is sure to please.

Shopping can be found just a short walk from the convention center to locations such as Bass Pro Shops, along with many other shops.

The OKC Thunder NBA Basketball team will host the the Dallas Mavericks Monday, February 4, at 7:00pm and Golden State, Wednesday, February 6, at 7:00pm. Tickets can be purchased online at www.nba.com/thunder/ticket-central.
Featured Bar/Restaurant

SRM 2013 is providing a featured bar/restaurant each night to provide registrants a place to go in the evenings to eat and/or socialize in one place.

Sunday

Bricktown Brewery
Serving Oklahoma products in their bar & grill type menu. Bricktown Brewery has a unique Beer Tap Table! There are only 4 in USA! The table seats up to 12 of your friends. Each table has four taps with four of our hand crafted beers ready to pour into your glass. Don’t forget to head over to The Wormy Dog Saloon, just a couple of blocks east, for the SRM 2013 Super Bowl Watch Party!
1 North Oklahoma Ave
OKC, OK 73104

Monday

Tapwerks Ale House & Cafe
Tapwerks Ale House & Cafe is Oklahoma’s oldest taphouse, with 212 taps AND Over 100 different bottled choices for your enjoyment!
121 E. Sheridan Ave.
OKC, OK 73104

Tuesday

Toby Keith’s I Love This Bar & Grill
With 12,000 square feet and seating for 450 guests, the restaurant’s emphasis will be on great home-style food. Don’t forget to sample the lamb fries!
310 Johnny Bench Dr.
OKC, OK 73104

Wednesday

Bolero | Spanish Grill & Tapas Bar
Bolero provides a unique experience by coupling delicious Spanish Tapas with an elegant, modern atmosphere.
Suite 140, 200 Oklahoma Ave.
OKC, OK 73104
Super Bowl XLVII Watch Party
February 3, 2013
At The

Doors Open at 5:30pm

Come and watch Super Bowl 47 with your friends at the SRM. The famous Wormy Dog Saloon is opening their doors for the SRM 2013 meeting!

The famous Wormy Dog Saloon has hosted many top Red Dirt and Country music bands. The modest exterior leads into a rustic hallway of autographed pictures of the legends who have played there. Enjoy a drink on one of the unique saddle bar stools or a game of pool or foosball upstairs with a bird’s eye view of the first floor from the balcony. The Wormy Dog Saloon is located just four and a half blocks east of the Cox Convention Center on Sheridan road in historic Bricktown.
SOCIAL TOURS

Buses load at the Cox Convention Center near the main entrance on the east end by the OKC Convention and Visitors Bureau booth.

WESTERN HERITAGE MUSEUM & OKLAHOMA CITY STOCKYARDS

Monday, February 4, 11:00am - 3:00pm, $45/person.

The National Cowboy and Western Heritage Museum is America’s premier institution of Western history, art and culture. Founded in 1955, the museum collects, preserves and exhibits an internationally renowned collection of Western art and artifacts while sponsoring dynamic educational programs and ground-breaking scholarly research. Stockyards City will offer guests a glimpse into Oklahoma’s unique western shopping experience.

BRICKTOWN BEER TASTING & APPETIZERS

Tuesday, February 5, and Thursday, February 7, 2:00 - 4:30pm. Meet at the registration desk at 1:45pm to walk to the brewery. Guests can be escorted back to the hotel by 4:30pm or can choose to stay and enjoy Bricktown. $25/person.

Bricktown Brewery is a full-service restaurant, offering a wide variety of hand-crafted beers. Enjoy an afternoon of beer tasting and family-style appetizers with an educational twist.

OKLAHOMA STATE CAPITOL AND OKC NATIONAL MEMORIAL MUSEUM

Wednesday, February 6, 10:30am - 3:00pm. $40/person.

Enjoy a tour of the beautiful architecture and artwork at the Oklahoma State Capitol and lunch with Oklahoma’s Secretary of Environment. Then view the OKC National Memorial and Museum which tells the story of one of the largest terrorist attacks on American soil.
TECHNICAL TOURS

Buses load at the Cox Convention Center near the main entrance on the east end by the OKC Convention and Visitors Bureau booth.

**Wichita Mountains Wildlife Refuge**

Saturday, February 2, 8:00am - 5:00pm, lunch provided, cost $50/person.

The Wichita Mountain Wildlife Refuge was established in 1901. The 59,020-acre refuge hosts a rare piece of the past, a remnant mixed grass prairie, an island where the natural grasslands escaped the plow due to its rocky terrain. From bison to prairie dogs, the Refuge has a lot to see!

**Fort Reno and Grazing Lands Research Laboratory**

Wednesday, February 6, 8:00am - 12:00pm, refreshments provided, cost $25/person.

This tour will visit the historic Ft. Reno and examine rangeland management and forage management research on-going at the Grazinglands Research Laboratory.

**Tallgrass Prairie Preserve The Nature Conservancy**

Friday, February 8, 8:00am - 5:00pm, lunch provided, cost $60/person.

The post-convention tour will visit The Nature Conservancy’s Tallgrass Prairie Preserve in Pawhuska, Okla., the birthplace of patch-burning. The Preserve is the largest protected tract of tallgrass prairie and is embedded within the 4 million-acre Flint/Osage Hills of Oklahoma and Kansas, the largest remaining tallgrass prairie landscape in North America. The Preserve hosts an over-wintering herd of 2,100 bison, free-roaming within their 24,000-acre unit that is managed with a prescribed fire program mimicking the pre-settlement frequency and seasonality of fire.
YOUNG PROFESSIONALS CONCLAVE ACTIVITIES

YPC SOCIAL

The YPC social will be held Monday, Feb. 4, 7:00pm at Tapwerks Ale House & Cafe in Bricktown, 121 E. Sheridan Ave, Oklahoma City.

YPC BUSINESS MEETING

The YPC business meeting will be held Tuesday, Feb. 5, 10:30am - 12:00pm in the Kingkade Room.

SILK WILD RAGS

This year the YPC will be selling our first edition silk wild rags! Each year we will produce a new version of the wild rags in a different color and with brands representing the state in which the annual meeting is being held. The wild rags will be sold near the registration desk in the lobby.

www.okfarmcredit.com
FARM CREDIT ASSOCIATIONS OF OKLAHOMA

CrossTimbers Land
**Student Activities**

**Student Contest Registration**
Sign up for all the student contests in one location. Registration is outside of Meeting Room 5.

**High School Youth Forum (HSYF) Activities:**

*HSYF Home Room: Meeting Room 9*

HSYF Orientation and Social, Sunday, 6:00 - 10:00pm, Meeting Room 9. Get acquainted with other HSYF students.

HSYF Ecological Tour, Monday, 8:00am - 4:45pm, off-site. Tour the Samuel Roberts Noble Foundation in Ardmore, OK. Tour of research ranches, greenhouses, and laboratories.

HSYF Professional Interaction Dinner, Monday, 6:00 - 8:00pm, off-site. Meet and visit with natural resource professionals in a relaxed atmosphere. This is a unique opportunity to learn about careers and network with professionals.

HSYF Paper Presentations, Tuesday, 8:00am - 5:00pm, Meeting Room 3. Each HSYF participant will give a 6-8 minute presentation on a rangeland or grassland topic of their choice. Presentations will be judged; the winner will be invited to attend the 2014 SRM Annual Meeting in Orlando, Fla., and present their topic at the Awards Ceremony. All SRM members and guests are invited to attend these presentations.

Student Conclave Luncheon, Tuesday, 12:00 - 2:00pm, Ballroom C. The HSYF group will attend the luncheon and meet with college and university undergraduate/graduate students. Members of the SRM BOD usually attend the luncheon, providing network opportunities.
HSYF Business Meeting & Workshop Wednesday, 7:00am - 3:00pm, Meeting Room 9. Students plan next year’s HSYF activities and elect the 2013/2014 HSYF officers. The HSYF Subcommittee selects presenters for this workshop to help students develop skills to enhance their future as a rangeland professional.

**Undergraduate Student Activities**

*Plant ID Study Room, Monday, 7:00am - 9:00pm, Meeting Room 20.*

Rangeland Job Fair, Sunday, 8:00am - 6:00pm, Meeting Rooms 16/17/18. This event matches prospective employers with educated job seekers.

Rangeland Employment Workshop, Sunday, 1:00 - 6:00pm, Ballroom E. Discussions will concentrate on the process of evaluating job announcements, gathering information, preparing check lists and writing the resume and cover letter, submitting the application, follow-up and preparing for the interview. This workshop will help students analyze their resume with discussions on how they may improve it.

Preparing for Academic Interviews, Sunday, 5:00 - 6:00pm, Meeting Room 3.

Student Conclave Business Meeting & Mixer, Sunday, 5:00 - 7:00pm, Meeting Room 5. All SRM student members are part of the Student Conclave and are invited to participate in Conclave Activities.

Student Chapter Display Contest, Monday, 8:00am - 8:00pm and Tuesday, 7:00am - 6:00pm, Exhibit Halls 1, 2, & A. Student SRM Chapters display their exhibits, awards will be presented at the Awards Ceremony.
Undergraduate Range Management Exam (URME), Monday, 7:00am - 12:00pm, Meeting Rooms 16/17/18. Undergraduate teams will compete to test their knowledge and understanding of range management and ecology. The top five scoring individuals and top five scoring teams will be recognized at the Awards Ceremony.

Undergraduate Extemp Speaking Contest, Monday, 1:00 - 5:00pm, Meeting Rooms 1 & 2. Preparation Room, Monday, 8:00am - 5:00pm Meeting Room 6. Undergraduates can compete in an extemporaneous public speaking contest.

Tapping The Top Mixer, Monday, 4:00 - 7:00pm, Ballroom C. This event provides students with an opportunity to meet and visit with top professionals from the range management and natural resource management fields.

Plant ID Contest, Tuesday, 8:00 - 10:00am, Meeting Rooms 16/17/18. This is a time-honored tradition of SRM. Students test their skills by identifying plants from a list of 200 important range plants. Awards will be given to top teams and individuals. SRM members are encouraged to view the Plant ID Exam, displayed after the contest, to test and renew their own plant ID skills.

Student Conclave Luncheon, Tuesday, 12:00 - 2:00pm, Ballroom C: All undergraduates are invited to attend and interact with fellow range management students, delegates from HSYF and senior members and leaders of SRM. After the luncheon, the Student Conclave will hold a formal business meeting to elect 2013/2014 officers: President, Vice-President, Reporter and Secretary.

Rangeland Cup, Tuesday, 2:00 - 5:00pm, Exhibit Halls 1, 2, & A. Teams present their solutions during the Tuesday afternoon poster session. Everyone is invited to view the posters and discuss the projects with team members.
Undergraduate Student Paper Session, Wednesday, 8:00am - 12:00pm, Meeting Room 3. Undergraduate students give oral presentations on research projects/papers to the SRM members. All attendees are invited to watch the presentations.

Graduate Student Paper & Poster Competitions, Monday - Thursday: Graduate student papers and posters are imbedded in the technical sessions along with professionals and academics. First and second prizes will be awarded in each category.

Undergraduate ESD Workshop, Thursday, 8:00am - 4:00pm, Meeting Rooms 1/2. Undergraduates have the opportunity to participate in their first ESD workshop, “Rangeland Ecology: Ecological Site Concepts and Their Applications.” This workshop will place emphasis on understanding ecological site concepts and description as defined by the Interagency ESD Handbook for Rangelands. Registration is required to attend.
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• Unique dry formulation makes mixing easier
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**Program At-A-Glance Saturday**

**Program At-A-Glance Sunday**

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**Bricktown Brewery Party**

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**Super Bowl Party**

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**STUDENT PROGRAM AT-A-GlANCE TUESDAY**

**Plant ID Coach Workshop**

**Grand Ave. Room**

**Range Cup**

**Student Conclave Lunch**

**Student Program At-A-Glance Tuesday**
### Student Program At-A-Glance Wednesday

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### Student Program At-A-Glance Thursday

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Workshop
Collaborative ESD Development Training
Ballroom D
Moderator: Joel Brown

8:00am  Welcome and Introductions
8:10am  Acceleration of ESD Development
        Mike Golden
8:40am  The Power of Collaboration
        Jamin Johanson
9:00am  Standards and Principles of ESD Development
        Cameron Loerch
9:25am  Questions and Discussion Regarding ESD Development Standards
9:45am  Break
10:00am A Good Old-Fashioned ESD Workgroup
        Scott Woodall
10:30am Military Ranching: The Value of Ecological Site Descriptions to Training Land Management
        Lucas Cooksey
10:55am Analyzing Agency Datasets Using the ESD Framework
        Mike Duniway
11:20am Poster Session (poster viewing)
        Spatial Modeling of Seedbed Microclimate and the Utility of ESDs for Rangeland Restoration Planning
        Stuart Hardegree
        Riparian Complex ESDs for BLM Allotment Management
        Sarah Quistberg
        ESD-based Wildlife Management at Fort Hood
        Mike Marshall

*ALL presentations are located in the Cox Convention Center unless stated otherwise.
Working Together to Create Ecological Sites in Far West Texas
Michael Margo

Distribution Weather Tools for Interpretation of State-transition Probabilities in Disturbed Systems
Stuart Hardegree

ESD-based Wildlife Management
Tom Monaco

12:00pm Lunch

1:00pm Getting More Bang for Your Buck: A multi-agency Approach to ESD Development in Missouri
Fred Young

1:30pm Linking USFS Data & Classification Concepts to ESD Development
Brandon Bestelmeyer

1:55pm Evaluating the Outcomes of Prescribed Grazing on Wyoming Ranches: An ESD-based Approach
Emily Kachergis

2:20pm STM Development: A Systematic Approach Focused on Quality Control
Tamzen Stringham

2:45pm Break

3:00pm Funding ESD Development
Ryan Leary

3:25pm NRCS Operating Procedures and Resources for ESD Development
Susan Andrews

3:50pm Discussion of ESD Collaboration Projects-Successes, Pitfalls, and Patterns

4:20pm Synopsis of Collaborative ESD Projects
Maria Fernandez-Gimenez

4:50pm Workshop Summary and Final Thoughts
Workshop
RTEC- Preparing for the Next Big Wildfire Season: Managing Fuels to Reduce Wildfire Risk in the Great Plains
Ballroom B
Moderator: Michael Pellant
1:00pm Lessons Learned From the Great Basin: Land of Big Fires and Multiple Fuels Management Strategies
Mike Pellant
1:20pm Wildfires in The Southern Great Plains and Novel Approaches to Fuels Management
Dirac Twidwell
1:40pm Grazing Strategies to Strategically Manipulate Fuels
Kent Pfieffer
2:00pm Fire Resistant Seedings to Reduce Wildfire Threats
2:20pm Break
2:40pm Prescribed Fire to Manage Fuels
Sandra Rideout Hanzak
3:00pm Mechanical Manipulation of Fuels
3:20pm Herbicides to Meet Fuel Management Objectives
Ron Sosebee

Plenary Session
The Future of Rangeland Fire in A Changing World
Ballroom C
Moderator: Dale Rollins
8:30am Introduction
Dale Rollins
8:45am Dust Bowls and Fire Storms: Changing Vulnerability to Climate
Tom Swetnam
Stephen Pyne

10:05am  Break

10:25am  Had Fire Been Included in the Early Development of Ecology
David M.J.S. Bowman

11:05am  Why Fire Should Be A Central Tenet of Rangeland Ecology and Management
Sam Fuhlendorf

**MONDAY AFTERNOON**

**Symposium**

100 Years of Rangelands Research on the Southern Great Plains

*Ballroom B*

Moderator: Stacey Gunter

1:00pm  The Dawn of the Southern Plains Range Research Station
Deena Fisher

1:20pm  John B. Sieglinger, Father of Combine Milo (1893-1977)
Bruce Maunder

1:40pm  Native and Introduced Warm-season Grass Breeding Over the Last Century
Tim Springer

2:00pm  Development of Eastern Gama-grass into the Desirable Grass it is Today
Jason Goldman

2:20pm  Break

2:40pm  Brush Control in the Southern Great Plains: Past, Present, and Future
Eric Thacker
3:00pm  Sand Sagebrush Rangeland Utilization by Cattle Producers
         Stacey Gunter
3:20pm  An Overview and The Next 100 Years with ARS
         Edward Knipling

Technical Session
Economics, Extension and Policy
Meeting Room 14
1:00pm  Herders Perception and Adaptation Strategies to Climate Change in Pakistan
         Srijana Joshi
1:20pm  Introducing Alberta’s Rangeland Research Institute
         Edward Bork
1:40pm  Quantifying Ecosystem Services from Pastureland in the United States: The Conservation Effects Assessment Project
         Matt Sanderson
2:00pm  Landowner Perceptions of Risk: Woody Plant Encroachment and Fire in Grassland Management
         Ryan Harr
2:20pm  Break
2:40pm  Ecosystem Payments - Considering Lost Opportunities
         Theresa Becchetti
3:00pm  From Local to Global: Launching the New Rangelands West Portals and Database
         Barbara Hutchinson
3:20pm  Teaching and Use of Riparian Proper Functioning Condition Assessment in Nevada
         Robert Gibson
Forum
GLCI Forum Ranch Stewardship: Successful Strategies and Lessons Learned
Ballrooms D/E
Moderator: Jeff Goodwin
12:50pm Welcome and Introductions
Jeff Goodwin
1:00pm Ranching in the Kansas Tallgrass Prairie
Bill Sproul
1:40pm Ranch Stewardship: The Importance of Monitoring
John Phelan
2:20pm Break
2:40 Striving for Rangeland Improvement
J.K. Rooter Brite Jr.
3:20pm Producing Grass Fed Genetics in North Louisiana
Gene Foster

Workshop
Great Plains Fire Science Exchange:
Bridging the information Gap between Land Management and Fire
Ballroom A
Moderator: Sherry Leis
1:00pm Bridging the Information Gap Between Land Management and Fire Science: Great Plains Fire Science Exchange
Sherry Leis
1:05pm Extreme Fire Behavior in Rangelands: What it is and how to plan for it?
Charles “Butch” Taylor
1:30pm Breakout Session Instructions
1:45pm Breakout Session 1
2:00pm Breakout Session 2
2:20pm  **Break** (resource table available)
2:40pm  **Breakout Session 3**
3:00pm  **Session Summaries**
        (Breakout leaders report to the group)
3:45pm  **Wrap-up, Participant Comments**
        and Suggestions
        Sherry Leis

---------------------------------------------

**Technical Session**
**Inventory, Monitoring, and Assessment**
**Meeting Room 15**

1:00pm  **Herbaceous Community Dynamics Following Above-Ground Harvest of Mesquite Trees**
        Jim Ansley

1:20pm  **Biomass Production of Desert Plant Species of Economic Importance in Chihuahua, Mexico**
        Martin Martinez Salvador

1:40pm  **Assessing Threats to Grasslands in The Prairie Peninsula: Eastern Redcedar Encroachment in the Grand River Grasslands**
        Ryan Harr

2:00pm  **Analysis of Selected Range Monitoring Techniques for Use in Determining Plant Community Composition as Described in State and Transitional Models of the Northern Plains**
        Aaron Field

2:20pm  **Break**

3:00pm  **Seasonal Estimating of Purple Threeawn (Aristida purpurea) Standing Crop Using a Non-destructive Method**
        Leobardo Richarte
The Effect of Proper Functioning Condition Driven Management on Water Quality in Elko County, NV
Robert Gibson

Determine Biologically Capable as a Function of Standing Residual Vegetation and Visual Obstruction for Selected Ecological Sites in the Dakota Prairie Grasslands
Dustin Ford

Workshop
ESD Workshop: Moving Forward with Common ESD Standards and Procedures
Meeting Room 19
Moderator: Dennis Thompson

1:00pm  Introduction to Workshop
Wayne Honeycutt

1:15pm  Ecological Site Introduction: Past to Present
Joel Brown

2:00pm  BLM Presentation
Sherm Karl

2:20pm  NRCS Presentation
Homer Sanchez

2:40pm  USFS Presentation
Jeff DiBenedetto

3:00pm  Hierarchy for Ecological Sites
Dave Cleland

4:00pm  National Leader Perspectives
Robert Bolton

4:00pm  National Leaders Perspective: BLM
Robert Bolton

4:15pm  National Leader Perspectives: USFS
Ric Lopez

4:30pm  National Leader Perspectives: NRCS
Terrell Erickson

4:45pm  Speaker Panel Q&A
Technical Session
Remote Sensing and Technology
Meeting Room 10

1:00pm  Ecosystem Performance and Anomalies In The Greater Platte and Upper Colorado Basins, USA
Matthew Rigge

1:20pm  Modeling Vegetation Heights from High Resolution Stereo Aerial Photography: An Application for Broad-Scale Rangeland Monitoring
Jeffery Gillan

1:40pm  A New GIS tool for Calculating Rangeland Carrying Capacity
Sarah Green

2:00pm  Comparison of Three Remote Sensing Methods To Predict Above Ground Plant Biomass Production
Tucker Porter

2:20pm  Break

2:40pm  Influence of Stocking Rate and Weather on Activity Patterns of Young Cows: A GPS Assessment
Mohammed Sawalhah

3:00pm  Pyric Herbivory of Free-roaming Horses in Northern Canada
Sonja Laverkus

3:20pm  Developing a Historical Map of Climax Vegetation Community at National Bison Range, Moiese, MT
Narciso Garcia Neto

3:40pm  Estimating Pinyon and Juniper Tree Cover Using NAIP Imagery Across Utah
Darrell Roundy
Workshop
Hands on Monitoring
Meeting Room 4
1:00 - 4:00pm
Moderator: Jack Alexander

Symposium
US Global Change Research Program
National Climate Assessment: Draft 2013 Report
Meeting Room 5
Moderator: Emily Therese Cloud

1:00pm  An overview of the National Climate Assessment: Draft 2013 NCA Report and sustained assessment process
David Gustafson

1:20pm  Climate Effects on Agriculture: Implications for Range Management
Jerry Hatfield

1:40pm  Tribal Lands
Bull Bennett

2:00pm  Land Use and Land Cover Change in the 2013 National Climate Assessment: Draft Findings
Emily Therese Cloyd

2:20pm  Break

2:40pm  Rural Communities
David Hales

3:00pm  Managing for Change Across the Great Plains: An Assessment of Climate Change Impacts to Communities and Dryland Systems of the Great Plains
Dennis Ojima
3:20pm  Assessment of Climate Change in the Southwest United States: Key Findings
Gregg Garfin

3:40pm  Range Management in a Context of Global Change--Framing Issues, Assessing Options, and Integrating Science and Action
P. Lynn Scarlett

4:00pm  Panel Discussion

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TUESDAY MORNING

Workshop
Coping with Drought on Rangelands
Meeting Room 1/2
Moderator: Joel Brown

8:00am  Overview of Symposium
Joel Brown

8:20am  Drought in Historic Terms
Brian Fuchs

9:00am  Drought Impacts Across Spatial Scales
Deb Peters

9:20am  Drought Impacts on Social Systems
Mark Brunson

9:40am  Questions

10:00am  Break

10:20am  Remote Sensing and GIS to Predict the Regional Impacts of Drought
Jay Angerer

10:40am  Assessing the Extent and Intensity of Drought with Soil Moisture Measurement
Tyson Ochsner

11:40am  Discussion

*The afternoon portion of this session can be found in the following afternoon section.
Symposium
Ecology and Management of Prairie-Chickens
Meeting Room 12
Moderator: Dwayne Elmore

8:00am  Icons of The Past and Beacons of The Future: Linking Prairie Grouse Ecology to Functioning Ecosystems
Christian Hagen

8:20am  Lesser Prairie-Chicken Response to Restoration of Sand Shinnery Oak Grasslands in Eastern New Mexico
David Haukos

8:40am  Population Demography of Lesser Prairie-Chicken in West Texas and Eastern New Mexico
Clint Boal

9:00am  Lesser Prairie-Chicken Expansion in Kansas
David Dahlgren

9:20am  Using Maximum Entropy Modeling for Lesser Prairie Chickens in Kansas
David Dahlgren

9:40am  Potential Impacts of Energy Development on the Lesser Prairie-Chicken Populations
Daniel Dusang

10:00am  Break

10:20am  Habitat Fragmentation and Variation in Life History Traits of the Lesser Prairie-Chicken
Michael Patten

10:40am  Targeting USDA Programs for Viable Prairie Chicken Populations and Sustainable Agricultural Operations
Christian Hagen
11:00am  Effects of Rangeland Management and Wind Power on Greater Prairie-Chickens in Eastern Kansas
Brett Sandercock

11:20am  Greater Prairie-Chicken Survival in Heterogeneous Grasslands
Torre Hovick

*The afternoon portion of this session can be found in the following afternoon section.*

Technical Session
Fire Ecology and Management
Meeting Room 10

8:00am  Prescribed Burning and Prescription Livestock Grazing to Maintain and Restore the Historic Foothill Parkland Vegetation Mosaic in Southwest Alberta
Michael Alexander

8:20am  Patch Burn Grazing Management Minimizes Use of Riparian Areas by Livestock, Increases Riparian Heterogeneity
Emily Hiatt

8:40am  Response of Buckbrush (Symphoricarpos orbiculatus Moench) to Fire in Tallgrass Prairie
Derek Scasta

9:00am  The Wildland Fire Assessment Tool (WFAT) - A Tool to Spatially Model Wildland Fire Behavior and First Order Fire Effects
Eva Strand

9:20am  Fire Regime Condition Class: Concepts, Applications, and Mapping Tool
Steve Barrett
9:40am  Cattle Responses to Patch Burns in the Semiarid Shortgrass Steppe
         David Augustine

10:00am  Break

10:20am  Summer Fire Increases Plant-Available Nitrogen and Phosphorus in the Northern Great Plains
         Marnie Rout

10:40am  Biomass is More Than Just Fuel
         Stephen Bunting

11:00am  Fire & Nitrogen Effects on Purple Threeawn Invaded Plant Communities
         Dustin Strong

11:20am  Seasonal Fluxes of Native Grass Bud Banks in Response to Season and Return Interval of Fire in the Northern Great Plains
         Morgan Russell

Technical Session
Invasive Species/Weed Management
Meeting Room 4

8:00am  Why is There Uncertainty on Whether Controlling Invasive Plant Species is Working?
         Stephen Young

8:20am  Adopting An Ecological Systems Approach to Improve Invasive Plant Management and Restoration
         Brenda Smith

8:40am  Evaluation of Soil Nitrogen Dynamics, Secondary Invasions, and Prescribed Fire for Yellow Sweetclover Control (Melilotus officinalis) in Northern Mixed-Grass Prairie Ecosystems
         Josh Averett
Long-term Effect of Training on Cattle Grazing Spotted Knapweed and Canada Thistle
Katie Tierney

Feeding Specific Amino Acids to Increase Redberry Juniper Consumption by Goats
Cory Owens

Maternal Influence on Juniper Consumption in Boer-Cross Goats
James Jackson

Break

Is Fusarium A Causal Organism in Cheatgrass Die-off
JanaLynn Franke

Modeling Eastern Redcedar Biomass in Kansas using Linear Spectral Unmixing Analysis of Satellite Imagery & High Spatial Resolution Imagery
Kevin Price

Novel Weapons: Do Invasive Grasses Produce Allelopathic Chemicals to Inhibit Native Grass Establishment, Growth, and Reproduction?
Mitch Greer

Bud Bank Density of Warm-Season Grasses as Regulators of Grassland Invasibility
Ray West

*The afternoon portion of this session can be found in the following afternoon section.
Workshop
Revitalizing Rangeland Education: A Plan for the Future
Meeting Room 11
Moderator: Karen Launchbaugh

8:00am  Introduction and Overview of Current Office of Personnel Management (OPM) Standards
Susan Edinger-Marshall

8:20am  Survey and Focus Group Results
Ed Krumpe

8:40am  Facilitated Panel Discussion facilitated by
Karen Launchbaugh

10:00am  Break

10:20am  Breakout Sessions
Karen Hickman

10:40am  Poll Breakout Groups
Karen Hickman

11:20am  Formulate A Plan
John Taylor

Symposium
Targeted Grazing: Management of Livestock Distribution
Ballroom A
Moderators: Larry Howery and Derek Bailey

8:00am  Introduction – Why worry about grazing distribution?
Derek Bailey

8:20am  Ecological Value of Managing Livestock Grazing Distribution
Ken Tate

8:40am  Advances in grazing distribution practices
Pat Clark
9:20am  Nature vs. Nurture: How Can We Create Adapted Animals?
Karen Launchbaugh

10:00am  Break

10:20am  Selection for Cattle Adapted for Sustainable Use of Extensive Rugged Rangeland: Part 1 - Understanding Important Phenotypes
Derek Bailey

11:00am  Selection of Cattle Adapted for Sustainable Use of Extensive Rugged Rangelands: Part 2 - What We Can Learn From The Genotype
Milt Thomas

11:20am  All Animals Used in Targeted Grazing Have Been Selected: Now it is Time to Target Selection to Enhance Their Efficacy as Targeted Gazers
John Walker

*The afternoon portion of this session can be found in the following afternoon section.

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Technical Session
Vegetation Management and Restoration
Meeting Room 14/15

8:00am  Interseeding Legumes Into Grass Dominated Pastures
Glen Shewmaker

8:20am  Factors Affecting Herbicide Selection and Use in Rangeland Restoration Programs
Robert Masters

8:40am  Opportunities for Grazing as an Ecological Tool in Military Training Area Management in Hohenfels, Germany
Peter Schreder
9:00am  The Importance of Maintaining Perennial Bunchgrasses in The Sagebrush Steppe
Tony Svejcar

9:20am  Assessing Legume Tolerance To Residual Broadleaf Herbicides in Northern Temperate Pastures Using Short-term Dose Trials
Amanda Miller

9:40am  Restoring Mountain Big Sagebrush Steppe Habitat after Western Juniper Control
Kirk Davies

10:00am  Break

10:20am  Evaluation of Factors Influencing Native Range Planting Success in South Texas
Anthony Falk

10:40am  Freezing Stress Influences Emergence of Germinated Bluebunch Wheatgrass Seeds
Chad Boyd

11:00am  Does Post Fire Fall Seed Bank Relative Abundance Correlate With the Following Spring Surface Vegetation Relative Abundance?
Dawn-Marie Jensen

11:20am  Mechanical Shredding As A Fire Surrogate in Restoring Sagebrush Grasslands
Jordan Bybee

*The afternoon portion of this session can be found in the following afternoon section.
Symposium
Women as Change Agents in the World’s Rangelands
Ballroom B
Moderator: D. Layne Coppock

8:00am  Welcome
Leslie Stewart-Phelps

8:20am  Gender and Natural Resources: Global Overview
Claudia Radel

8:40am  Women and the SRM: Past, Present and Future
Barbara Allen-Diaz

9:00am  Cross-Border Interaction Spurs Innovation and Hope among Pastoral Women of Ethiopia and Kenya
Layne Coppock

9:20am  Women, Sheep and Goats: The Livestock Farming Economy of Mexico From a Gender Perspective
Veronica Vazquez-Garcia

9:40am  Women and Extensive Livestock Production in Afghanistan
Catherine Schloeder

10:00am Break

10:20am Women as Collaborative Leaders in US Rangelands
Laura Van Riper

*The afternoon portion of this session can be found in the following afternoon section.

Producer Forum
Successful Ranching: Livestock, Wildlife, Fire, and Fence
Ballrooms D/E
Moderator: Rod Heitschmidt

8:00am  Introduction
Rod Heitschmidt
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<td><strong>Mob Grazing and Wildlife Management</strong></td>
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<td><strong>Growing Season Rotational Stocking</strong></td>
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<td>9:30am</td>
<td><strong>Break</strong></td>
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<tr>
<td>10:05am</td>
<td><strong>Making Multiple Grazing Systems Work</strong></td>
<td>Weston Givens</td>
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<td>10:30am</td>
<td><strong>Double Stock Yearling Grazing on Patch Burned Rangeland</strong></td>
<td>Bill Sproul</td>
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<tr>
<td>10:55am</td>
<td><strong>Using Stocker Cattle and Fire to Manage Rangeland</strong></td>
<td>Ted Alexander</td>
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</table>

*The afternoon portion of this session can be found in the following afternoon section.*

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**Tuesday Afternoon**

Workshop

ESD Workshop: Concepts, Classification, Differentiation, & Description of Ecological Sites

Meeting Room 19

Moderator: Homer Sanchez

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>1:00pm</td>
<td><strong>Resilience Concepts in STMs: Understanding Disturbance Responses</strong></td>
<td>Tamzen Stringham</td>
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<tr>
<td>2:00pm</td>
<td><strong>Steps for Classification, Differentiation, and Description of Ecological Sites</strong></td>
<td>Kendra Moseley</td>
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<tr>
<td>2:40pm</td>
<td><strong>Ecological Sites and Their Relationship to Soil Mapping</strong></td>
<td>Steve Campbell</td>
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<tr>
<td>3:00pm</td>
<td><strong>Break</strong></td>
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</tbody>
</table>
3:30pm  How to Access ESD Products  
Steve Campbell

3:50pm  How Do We Move from Multiple Existing Ecological Land Divisions to One Common Ecological Site?  
George Peacock

4:20pm  How Do We Get Information from Multiple Agencies/Groups Into One Corporate Database?  
George Peacock

4:45pm  Speaker Panel Q&A

Workshop  
Coping with Drought on Rangelands  
Meeting Room 1/2  
Moderator: Joel Brown

1:00pm  Improving Policies to Mitigate the Impacts of Drought  
Peter Folger

1:20pm  Mitigating the Economic Impact of Drought with Improved Programs  
Amy Roedeer

1:40pm  Mitigating Drought with Improved Assistance  
David Kraft

2:00pm  Mitigating Drought with Improved Management Practices  
Jim Thorpe w/local ranchers

2:20pm  Break

2:40pm  Land Managers Responses to Drought  
Layne Coppock

3:00pm  Building Adaptive Capacity to Respond to Drought  
Kris Havstad

3:20pm  Discussion
Symposium
Ecology and Management of Prairie-Chickens
Meeting Room 12
Moderator: Dwayne Elmore

1:00pm  Spatiotemporal Lek Movements of The Greater Prairie-Chicken Within a Fire-prone System
        Brady Allred

1:20pm  Breeding Habitat Selection and Productivity of Greater Prairie-Chickens in the Nebraska Sandhills
        Lars Anderson

1:40pm  A Comparison of Habitat Selection and Success of Greater Prairie-Chickens in Tallgrass and Mixed Grass Prairies in Nebraska
        Larkin Powell

2:00pm  Investigation of Thermal Habitat Selection by Greater Prairie-Chickens
        Torre Hovick

2:20pm  Break

2:40pm  Distribution and Landscape Attributes of Greater Prairie-Chickens and Sharp-Tailed Grouse Outside of Their Traditional Range in South Dakota
        Mandy Orth

3:00pm  Implementation Of Patch Burning: A Management Tool For The Attwater's Prairie Chicken
        Carl Schwope

3:20pm  Attwater's Prairie-Chicken Brood Survival-The Insect Connection
        Mike Morrow
Technical Session
Invasive Species/Weed Management
Meeting Room 4

1:00pm  Lespedeza Cuneata Suppression in Tallgrass Prairie Through Integration of Herbicide Control and Patch-burning
Valerie Cook Fletcher

1:20pm  SenderoTM Herbicide for Honey Mesquite (Prosopis glandulosa) Control
D. Chad Cummings

1:40pm  Fire and Herbicide Impacts On Annual Species Successional Dynamics Within Salt Desert Shrub Communities
Merilynn Hirsch

2:00pm  Break

2:20pm  Caucasian Old World Bluestem vs. Native Species: Grass Development and Nutritive Value
Keith Harmoney

2:40pm  Climate Change and Invasion: Does A Loss of Ecological Integrity Affect The Cultural Expression of An Indigenous Culture?
Valerie Small

Symposium
Targeted Grazing: Management of Livestock Distribution
Ballroom A

Moderators: Larry Howery and Derek Bailey

1:00pm  Integration of Targeted Grazing with Other Vegetation Management Techniques
Rachel Frost

1:20pm  Why Use Cattle for Targeted Grazing?
Larry Howery
1:40pm How Effective is Targeted Cattle Grazing?
Retta Bruegger

2:00pm Keys To Making Targeted Cattle Grazing More Effective
Mitch Stephenson

2:20pm Break

2:40pm Potential Effect of Fine Fuel Management By Targeted Cattle Grazing on Wildfire Behavior
Leticia Varelas

3:00pm Economic Evaluation of Targeted Cattle Grazing to Reduce Fire Hazard and Keys to Making it A Viable Option
Allen Torell

3:20pm Social Factors Influence the Implementation of Targeted Cattle Grazing and Other Rangeland Innovations
Maria Fernandez-Gimenez

Technical Session
Vegetation Management and Restoration
Meeting Rooms 14/15
1:00pm Quantifying Dispersal Processes and Water Inputs On Plant Community Assembly
Merilynn Hirsch

1:20pm Purple Threeawn In Vitro Fermentation and Gas Production Response To Nitrogen Fertilization and Fire
Nickolas Dufek

1:40pm Plant Establishment and Soil Microenvironments in Utah Juniper Masticated Woodlands
Kert Young
2:00pm  Factors Associated With Native Vegetation Recruitment Into Established Crested Wheatgrass Stands
        Aleta Nafus
2:20pm   Break
2:40pm  Cultural Thinning of Native Sagebrush Stands to Increase Seed Yield
        Brad Geary
3:00pm  Effects of Fuel Control Treatments on Vegetation Responses Across A Pinyon-juniper Tree Invasion Gradient
        Bruce Roundy
3:20pm  Evaluating Plant-Soil-Microbial Interactions in Low-Input High-Diversity Biofuels: Enhancing Aboveground Ecosystem Services while Increasing Soil Quality
        Morgan Noland

SYMPOSIUM
Women as Change Agents in the World’s Rangelands
Ballroom B
Moderators: D. Layne Coppock
1:00pm  Women and Range Education
        Amy Ganguli
1:20pm  Gender Aspects of Rangeland Management in Mongolia
        Tungalag Ulambayar
1:40pm  Shifting Into the Driver’s Seat - Women of the Australian Rangelands Driving Change
        Sally Leigo
2:00pm  Range Women: Integrating Women's Voices into Rangeland Management Research and Extension Design
Hailey Wilmer

2:20pm  Break

2:40pm  Pastoral Women of the Andes of Bolivia and Peru
Corinne Valdivia

3:00pm  Reflection, Synthesis and Global Lessons Learned
Jeannie Harvey

Producer Forum
Successful Ranching: Coping With The Energy Industry
Ballrooms D/E
Moderators: Chuck Coffey

1:00pm  Introduction
Chuck Coffey

1:15pm  Do's and Don'ts of Wind Energy
Shannon Ferrell

1:45pm  Successfully Managing Surface Impacts
Chuck Wilson

2:15pm  Discussion

2:45pm  Ranching and Energy
Stan Kimbell

3:15pm  Dealing With the Ecological Impacts of the Energy Industry
Bob Hamilton

3:45pm  Discussion
Wednesday Morning

Workshop
Assessment and Monitoring of Lentic Riparian Areas
Meeting Room 4
Moderator: Lou Hagener

8:20am  Introduction: Overview of Previous Lentic Community
Lou Hagener

8:40am  Assessing Proper Functioning Condition of Lentic Areas
Sandra Wyman

9:20am  Needs for Practical Quantitative Functional Monitoring of Lentic Riparian Areas
Sherman Swanson

10:00am  Break

10:20am  The Forest Service Groundwater-Dependent Ecosystems Protocol: Assessing the Function and Condition of Springs and Isolated Wetlands
Joe Gurrieri

10:40am  Meadow Hydrogeomorphic Types for the Sierra Nevada and Southern Cascade Ranges in California: A Field Key
Dave Weixelman

11:20am  Prioritization of Remediation Projects of Springs Ecosystem Assessments in Western Semiarid Forests
Kyle Paffett
Symposium
Feral Pigs on Rangelands:
The Good, The Bad, and The Ugly
Meeting Rooms 1/2
Moderator: Russell Stevens
8:00am Introduction and What's Your Feral Hog IQ?
Dale Rollins
8:20am History & Biology of Feral Hogs in North America
Billy Higginbotham
9:00am Feral Hogs On Rangelands
Russell Stevens
9:20am Feral Hogs vs. Livestock
Ken Cearley
9:40am Feral Hogs vs. Wildlife
Dale Rollins
10:00am Break
10:20am Control Options
Josh Gaskamp
10:50am Research Needs/Updates
Tyler Campbell
11:20am Coping with Feral Swine
Ken Cearley
11:40am Q&A

Symposium
Fire and Fuels Modeling: Emerging Applications for Rangelands
Ballroom B
Moderator: Dirac Twidwell
8:10am Introduction
Dirac Twidwell
8:20am Using Physical Chemistry and Climate To Estimate Fire Frequency
Richard Guyette
8:40am  Comparisons of Modern and Historical Wildfire Risk Estimates Among Vegetation Types of the U.S.
Mark Finney

9:00am  An Invasive Grass Increases Live Fuel Proportion and Reduces Fire Spread in A Simulated Grassland
Devan McGranahan

9:20am  Coupling Fire Physics and Fire Ecology To Quantify State Transitions and Guide Restoration Actions
Dirac Twidwell

9:40am  Coupled Weather-wildland Fire Behavior Models From The Microscale To Mesoscale
Janice Coen

10:00am Break

10:20am  Development and Applications of the Wildland-Urban Interface Fire Dynamics Simulator (WFDS)
William Mell

10:40am  Fuel Load, Heterogeneity, Spatial Scale, and Environmental Conditions Affect Fire Behavior in Grasslands - Results From The WFDS Physics Based Process Model
Eva Strand

11:00am  Modeling Fuels and Fire Danger for Rangelands within the OK-FIRE Framework
J.D. Carlson

11:20am  Moving Toward An Era of Management Decisions Based on Sound Science
Sherry Leis
Workshop
Fire Ecology and Management of Texas Oak Woodlands
Meeting Room 11
Moderator: Michael Stambaugh

8:00am Burning in The Shadows of The Nation's Largest Metroplexes: Challenges and Management Recommendations
Glen Gillman

8:20am Using Fire To Manage Endangered Species Habitat in Texas Oak Woodlands, A Case Study
Wade Harrell

8:40am Is Fire Enough? The Joint Effects of Fire and Deer Herbivory on Hardwood Regeneration and Species Composition in Central Texas Woodlands
Christian Andruk

9:00am Historic Fire Frequencies of Oak Woodlands in The Southern Plains
Michael Stambaugh

9:20am Fire Effects and Restoration Challenges Within a Central Texas Pine-Oak Forest Following an Intense Summer Wildfire
Gregg Creacy

Technical Session
Grazing Ecology and Management
Meeting Rooms 14/15

8:00am Can Rotational Grazing Promote Plant Community Productivity? A Three Year Clipping and Watering Experiment in The Dry Mixedgrass Prairie
Tanner Broadbent
8:20am  Nutritional Mapping of Reindeer Grazing Areas of the Seward Peninsula, Alaska
         Greg Finstad

8:40am  Effects of Divergent Management Practices on Germinable Seed Bank Composition and Legume Abundance in Northern Temperate Pastures
         Lysandra Pyle

9:00am  Livestock Water Quality in Spring of 2009 To 2012 Varies Across Years in Eastern Montana
         Mark Petersen

9:20am  Evaluating The Grazing Response Index Against Key Forage Species in The Southern Interior of British Columbia
         Vanessa Volpatti

9:40am  Factors Affecting Seasonal Resource Selection Patterns of Young Cows Grazing Piñon-juniper Grassland Mosaics
         Vanessa J. Prileson

10:00am  Break

10:20am  Declining Range Condition Under The Recommended Stocking Rate: The National Bison Range, Montana
         Clayton Marlow

10:40am  Behavioral Syndromes and Adaptation of Beef Cattle To Rangeland Grazing Environments: A Case Study
         Laura Goodman

11:00am  Diet Quality and Grazing Behavior of Cattle and Goats in The Chihuahuan Desert
         Carlos Villalobos
11:20am  Species Composition Changes and Animal Performance in Response To Patch Burning and N Fertilization on Degraded Warm Season Pasture
Benjamin Schiltz

Workshop
Undergraduate Student Papers
Meeting Room 3
Moderator: Loreen Allphin

8:00am  Patch Burns and Drought Shape Spatial and Temporal Patterns of Grazing
Jonas Hill

8:20am  Crude Protein Content of Repeatedly-grazed and Ungrazed Rangeland Following Fire
Charlotte Henderson

8:40am  Determination of Greater Sage-Grouse habitat near Challis, Idaho
Brianne Lind

9:00am  Onobrychis Chorossanica Perspective Phytomeliorative Plant for Arid Rangelands
Mardieva B.

9:20am  A Continued Analysis of The Population Expansion of Yellow Bluestem in Kansas Southern Mixed Grass Prairie
Adam Rusk

9:40am  Soil Water Availability in Pinyon-juniper Communities
Wyatt Shakespear

10:00am  Break

10:20am  Low-cost GPS Units to Collect Movement and Location Data from Livestock
Elise M. Hughes-Berheim
10:40am Long-term Effects of Riparian Exclosures on Vegetation Composition
Julia M. Workman

11:00am How Can Prescribed Fire Be Used To Reduce Fire Hazard in British Columbian Forested and Range-lands in the Years to Come?
Kay Googel

11:20am Estimation of Soil Bacteria and Fungi in Soil Treated With A Biostimulant
Nicole Farless

11:40am Persistence of Belowground Bud Bank of Smooth Brome in Response to Mowing Treatments
Taylor Ranum

Wednesday
Afternoon

Workshop
ESD Workshop: Data Mining; Locating and Analyzing Vegetation Data
Meeting Room 19
Moderator: Homer Sanchez

1:00pm Confirming Range Site Concepts Through Literature Review
Shane Green

1:30pm Partnering to Finding Legacy Data from TNC and Heritage Databases
Stacy Clark

2:00pm Data Support Efforts for Florida Ecological Sites
Greg Hendricks

2:30pm Using GIS Data Layers in The Field
Patti Novak-Echenique

3:00pm Break
3:30pm  Integrating Multiple Sources of Data and Information in ESD Development
Brandon Bestelmeyer

4:15pm  Pooling Together Different Sources of Data to Produce Outputs: Utilizing PC-ORD As An Analytical Support Tool
Ken Spaeth

Workshop
Seed 101- Inner Workings and Realities of the Seed Industry and Ways to Preserve, Protect and Enhance Public Lands
Meeting Room 3
1:00 - 4:00pm
Moderator: Leslie Cahill

THURSDAY MORNING

Symposium
Adaptive Management of Rangelands: Science, Practice and Partnership
Ballroom A
Moderator: Leslie Roch

8:20am  Introduction

8:40am  Talking across Fences: Social Learning through Adaptive Management
Maria Fernandez-Gimenez

9:00am  Collaborative Adaptive Science for Self Reliance: Redefining Community-University Partnerships
Corrine Knapp

9:20am  Adaptive Grazing Management on Working Ranches: Linking Decision-making to Outcomes
Emily Kachergis
9:40am  Evolution of Tenure Regimes and Adaptive Management in Pastoral Systems
Robin Reid

10:00am  Break

10:20am  Adaptive Management for Diverse Stakeholder Goals: A Participatory Grazing Management Experiment
Leslie Roche

10:40am  A Triangular Approach to the Adaptive Management Circle
Lynn Huntsinger

11:00am  Integrating Adaptive Management into Rangeland Research: Looking Forward
David Briske

11:20am  Closing Panel
All Participants

Workshop
ESD Workshop: Ecological Site Description; Use and Benefits
Meeting Room 19
Moderator: Homer Sanchez

8:00am  Use of ESDs for NEPA and Other Planning Documents
Jack Alexander

8:30am  How ESDs Are Used in The Field
Jennifer Hayward

9:30am  How ESDs Can Facilitate Restoration of Sagebrush Ecosystems
Mike Pellant

10:00am  Break
10:30am Military: The Value of Ecological Site Descriptions to Training Land Management
Lucas Cooksey
How ESDs Facilitate Endangered Species Management
Mike Marshall
11:10am Use of Modeling for Resource Assessments At The National Scale
Loretta Metz
11:30am Use of Ecological Sites in Research Grants
Jim Dobrowolski
11:55am Closing Remarks
Dennis Thompson

Workshop
TSP Workshop: Conservation Planning for Ranchers Transitioning to Organic Grazing
Meeting Room 10
8:00 - 11:40am
Moderator: Dana Larsen
*The afternoon portion of this session can be found in the following afternoon section.

Workshop
Sustainable Ranch Management: Monitoring, Assessment, and Business Planning
Ballroom B
Moderator: Kristie Maczkzo
8:00am Registration, Coffee and Welcome
John Tanaka
8:20am Sustainable Rangelands Roundtable (SRR) Overview
Kristie Maczkzo
8:40am  Use of NRCS Conservation Planning and Ecological Indicator Monitoring for Sustainable Business Planning Information
Gene Fults

9:20am  USDA NRCS Conservation Program Financial And Technical Assistance to Support Producers in Conservation, Assessment and Business Planning
Dennis Thompson

10:00am  Break

10:20am  Use of Monitoring and Business Planning in the Context of Joint Cooperative Monitoring and Federal Grazing Allotments
Doug Powell

10:40am  SRR Ecological Assessment Indicators: Selection and Monitoring Techniques
Mike Smith

11:20am  SRR Legal, Educational and Institutional Indicators
John Mitchell

*The afternoon portion of this session can be found in the following afternoon section.

Native American Forum
Native Range Session: Effective Tools for Equipping Rangeland Managers on Tribal Lands
Meeting Rooms 16/17/18
Moderator: Alicia Seyler and Nick Padilla

8:00am  Prayer and Welcome - Introduction to Session
Alicia Seyler

8:05am  Summary of Native Rangeland Initiative Status
Diana Doan-Crider
8:10am  Rangeland Inventory and Monitoring on Tribal Lands
9:10am  Database Management for Tribal Rangeland Managers
9:40am  Translating Remote Sensing Information for Tribal Needs
10:20am Break
10:40am  Adapting to Climate Change, and Planning for Drought and Wildfire on Tribal Lands

*The afternoon portion of this session can be found in the following afternoon section.

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Technical Session
Rangeland Ecology
Meeting Rooms 14/15

8:00am  Analysis Tools for Development of Rangeland ESD's and Forage Suitability Groups (FSG's)
        Kenneth Spaeth
8:20am  Plant Functional Traits Improve diversity-based Predictions of Temporal Stability of Grassland Productivity
        Wayne Polley
8:40am  Vegetation Response to Wildfire on the Cimarron National Grasslands
        Walter Fick
9:00am  Ecology and Management of Soapweed Yucca (Yucca glauca Nutt.) in the Nebraska Sandhills
        Ellen Miller
9:20am  Species Richness and Community Ecology of Upland Tallgrass Prairie Sedges (Cyperaceae)
        John Mulloy
9:40am  Impact of Seed Scarification and Soil Crusting on Greenhouse Seedling Emergence in Three Native Legumes
Douglas A. Johnson

10:00am  Break

10:20am  A Test of Catastrophic Transition Mechanisms In The Chihuahuan Desert Grassland
Lauren Svejcar

10:40am  Exceptional Drought Events Cause Patch-level Patterns of Woody Dieback in Semiarid Texas: Comparing the 2000s To The 1950s
Carissa L. Wonkka

11:00am  Manipulating Prolonged Drought Conditions on a Prickly Pear Encroached Rangeland
Gabriela Sosa

11:20am  Effects of Fugitive Dust from Roads Crossing Arid Rangelands
Mark Brunson

Technical Session
Wildlife Habitat and Management
Meeting Rooms 4/5

8:00pm  Conservation, Development by Design and Population Augmentation to support Sage-Grouse recovery in South eastern Alberta, Canada
Kevin France

8:20pm  Capturing Local Knowledge of the Gunnison Sage-grouse for Improved Conservation
Corrine Knapp

8:40am  Spatial Heterogeneity in Response of Greater Sage-Grouse to Energy Development
Jeffery Beck
9:00am Sage-grouse in Nevada - Reconciling Science and History
Kent McAdoo

9:20am Impacts of Cattle Stocking Rates on Grassland songbird Communities in a Northern Mixed-grass Prairie
Kelsey Molloy

9:40am Assessing The Influence Guzzlers and Other Habitat Features Have on Species Occupancy in CRP Fields Across Western Kansas
Brandon Calderon

10:00am Break

10:20am Selection of Brood Rearing Habitat by Chinese Ring-necked Pheasant in Southwestern North Dakota
Mark Mazza

10:40am Habitat Associations of Grassland Birds Along a Gradient of Eastern Redcedar Encroachment in Central Kansas
Scott Schmidt

11:00am Influence of Wind Turbines on Mammalian Occupancy Patterns
Brian Tanis

11:20am The California Black Rail on Foot-hill Rangelands
Gareth Fisher

*The afternoon portion of this session can be found in the following afternoon section.
Workshop
ESD Workshop for Undergrads
Meeting Rooms 1/2
8:00 - 11:40am
Moderator: Mark Moseley

*The afternoon portion of this session can be found in the following afternoon section.

THURSDAY AFTERNOON

Workshop
TSP Workshop: Conservation Planning for Ranchers Transitioning to Organic Grazing
Meeting Room 10
1:00 - 4:00pm
Moderator: Dana Larsen

Workshop
Sustainable Ranch Management: Monitoring Assessment, and Business Planning
Ballroom B
Moderator: Kristie Maczko

1:00pm  SRR Economic and Social Assessment Indicators
John Tanaka

1:20pm  SRR Rangeland Ecosystem Services Assessment Framework
Lori Hidinger

1:40pm  Business Planning Concepts and Methods - How does it work?
Dan Childs

2:20pm  Break

2:40pm  The Business Planning Process and Incorporation of Monitoring Information
John Tanaka

3:40pm  Questions and Discussion
John Tanaka
Native American Forum
Native Range Session: Effective Tools for Equipping Rangeland Managers on Tribal Lands
Meeting Rooms 16/17/18
Moderator: Alicia Seyler, and Nick Padilla

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<td>Invasive Species Control and Culturally Sensitive Species</td>
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<td>1:40pm</td>
<td>Land Management Funding Opportunities for Tribal Members</td>
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<td>2:00pm</td>
<td>Rangeland Health Considerations for Leasing Oil and Gas on Tribal Lands</td>
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<td>2:20pm</td>
<td>Feral Horses on Tribal Lands</td>
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<td>2:40pm</td>
<td>How Tribal Colleges Can Partner to Strengthen Tribal Rangeland Management Efforts</td>
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<tr>
<td>3:00pm</td>
<td>Coffee Break &amp; Working Groups</td>
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Technical Session
Wildlife Habitat and Management
Meeting Rooms 4/5

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<tr>
<td>1:00pm</td>
<td>Paying Cattle Ranchers for Ecosystem Services To Create, Restore, and Manage Habitat for Mitigation: A Case Study from California's Working Rangelands Sheila Barry</td>
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<tr>
<td>1:20pm</td>
<td>Collaborating to Mobilize Traditional Knowledge and Practices in Land and Resource Management Involving the Ecological Restoration of An Endangered Species Sonja Leverkus</td>
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</table>
1:40pm  An Assessment of Pronghorn Habitat Suitability for the Carrizo Plain National Monument and the Tejon Ranch in the Central Valley region of California
Virgina Burroughs

2:00pm  Seasonal Dynamics of Nutritional Quality During a Drought of Four Browse Species Preferred by White-tailed Deer (Odocoileus virginianus) in the Rolling Plains of Texas
Carlos Villalobos

2:20pm  Break

2:40pm  Summer Watering Patterns of Mule Deer in the Great Basin Desert: Implications of Differential Use By Individuals and The Sexes for Management of Water Resources
Andrew Shields

3:00pm  Habitat Types Associated With Adult and Neonate Mule Deer Mortalities in North-central New Mexico
Grant Sorensen

Workshop
ESD Workshop for Undergrads
Meeting Rooms 1/2
1:00 - 4:00pm
Moderator: Mark Moseley
Poster Sessions

Two Sessions
A- Monday Viewing 10:00am - 6:00pm
Authors presenting 4:00 - 6:00pm
B- Tuesday Viewing 10:00am - 6:00pm
Authors presenting 4:00 - 6:00pm

Exhibit Halls 1, 2, & A

Poster Session A

1 Perceptions of Drought: How Ranchers in Arizona Prepare for and Respond to Drought
Greg Butler

2 Microclimate Modification Effects on The Species Composition of BC Grassland Communities
Donald Thompson

3 Comparison of Rainfall Products of Varying Spatial Scales on Herbaceous Biomass Outputs from the Phytomass Growth Simulator
Edward Rhodes

4 Potential Direct and Indirect Effects of Climate Change on Northern Great Plains Grasslands
David King

5 Influence of Extreme Precipitation Events on Livestock Production in Shortgrass Steppe
Justin Derner

6 Effects of Soil Heterogeneity on Woody Plant Encroachment in the Argentine Caldenal Region: A Classification Approach
Lauren Svejcar
Assessing Disturbance Regimes of Northern Temperate Pastures Using Landowner Surveys
Lysandra Pyle

Linkages Between Livestock-raising and Acequia Irrigation Farming in Rural Communities of Northern New Mexico: A Preliminary Assessment
Stephanie Lopez

Seed Harvesting of Native Plants to Improve Income and Natural Resources Sustainability on a Rural Area at Central Sonora
Martha Martin

Analysis of Beef Cattle Operations in Sonora
Francisco G. Denogean B.

Economic Diversification of Farms in Namibia
Laura Snell

A Snapshot of Wyoming Ranching Operations: Natural Resource Goals
Emily Kachergis

The Internet
Shayan Ghajar

Patch Burn-learning: Rangeland and Liberal Arts Education
Devan McGranahan

California-Pacific Section Range and Natural Resources Youth Camp Curriculum - Modifications and Challenges
Julie Finzel

A Unique Partnership In Rangeland Stewardship and Management: Alberta Environment and Sustainable Resource Development and the Rocky Mountain Forest Range Association
Michael Alexander
17 Combustion Dynamics of Cattle Fecal Pats
Derek Scasta

18 Who Can Take The Heat: Caespitose Grass Response to Increasing Fuel Loads
Ryan Limb

19 Effects of Fire and Herbivory on An Endangered Terrestrial Orchid in a Texas Post Oak Savanna
William Rogers

20 Predicting Litter and Live Herb Fuel Consumption During Prescribed Fires in Native and Old-field Upland Pine Savannas of the Southeastern United States
Angela Reid

21 Fire Seasonality Effects on Northern Mixed Prairie Production and Cover
Lance Vermeire

22 Evaluating the Impact of Wyoming Big Sagebrush Fuel Loads on Bunchgrass Mortality Following a Fire Event
April Hulet

23 The Influence of Fire Severity on Ecological Succession Patterns Within An Aspen-conifer Post-fire Community
Steven Petersen

24 Post-Fire Soil Water Repellency: Persistence Within Piñon-Juniper Woodlands
Daniel Zvirzdin

25 Impact of High Stocking Density Grazing on Livestock Walking and Resting Behavior
Alexander Smart

26 Impact of High Stocking Density Grazing on Litter Decomposition
Megan Mortellaro
Feeding the Pasture vs. Feeding the Steer: Interaction of Fertilizer & Supplement Inputs to a Wheat Grazing System
Ryan Reuter

In Situ Disappearance of Bypass DNA from Sagebrush Plants in Cattle by qPCR
Jose Alberto Perez-Amaro

Two Year Regrowth Patterns of Three Key Forage Species in the Southern Interior of British Columbia
Vanessa Volpatti

Environmental Characterization of Rangeland Pastures in Piñon-juniper Grassland Mosaics in Central New Mexico
Vanessa J. Prileson

Nutritive Value and Cattle Preferences in an Old Boer Lovegrass Stand Treated with Biosolids in Cananea
Fernando Ibarra

Utilizing Winter Grazing to Create Heterogeneity in a Northern Prairie Grassland: Livestock use and Distribution
Christina Koehler

Effects of Forest Harvesting
Terri France

Ecological Responses to Cattle Grazing on a Degraded Southeastern Arizona Mine Site
Shawn Stone

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Pedro Jurado-Guerra

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Michael Schellenberg

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Martha Martin

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Salomon Moreno

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Lindsey Meyers

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Adam McMahon

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Kacey Capuchino

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Allen Casey

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Matthew Madsen

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Matthew Madsen

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Tammy Koldyke

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Amy Gooch

Sage-grouse Habitat Models for The State of Utah
Chris Balzotti

Rangeland Cup

Rangeland Cup
### Board/Committee Meetings

All rooms labeled **MR (meeting room)**, **Ballroom**, **Exhibit Hall** and **Native American Room** are located in the Cox Convention Center. All other rooms are located in the Renaissance Hotel, just across the skywalk.

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<tr>
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<td>Advisory Council</td>
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<tr>
<td>Awards Committee</td>
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<td>3:00pm - 5:00pm</td>
<td>Threadgill</td>
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<tr>
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<tr>
<td>Certified Range Mang. Consultants (CRMC)</td>
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<td>History Archives &amp; Library Committee</td>
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<td>Kingkade</td>
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<td>Sun.</td>
<td>1:00pm - 5:00pm</td>
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<td>Membership Committee</td>
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<td>Nominations Committee</td>
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<td>NRCS West Region Grazing Consortium</td>
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<td>Outreach &amp; Comm. Committee</td>
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<td>Policy and Public Affairs</td>
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<td>8:00am - 6:00pm</td>
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<tr>
<td>Event</td>
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<td>Rangeland Assessment &amp; Monitoring Committee</td>
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<td>Rangeland Invasive Sp. Committee</td>
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<td>Rangelands Editorial Board</td>
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<td>Advisory Council</td>
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<tr>
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<tr>
<td>SRM BOD</td>
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<tr>
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<td>YPC Business Meeting</td>
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<td>2013 Planning Committee</td>
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<td>Thurs.</td>
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<td>2014 Meeting Planning Committee</td>
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<td>USDA/ARS Meeting</td>
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<tr>
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2013 OKC SRM COMMITTEE

2013 SRM Meeting Co-Chairs: Karen Hickman and Brian Northup
Finance: Steve Glasgow and Brandon Chandler
Host/Special Events: Jane Fuhlendorf, Chad Cummings and Stacy Payne
Local Arrangements: Melissa Teague, Kim Stine and Denise Turner
Producer Activities: Russell Stevens, James Rogers, Terry Bidwell and Mark Moseley
Program: Dwayne Elmore, Dave Engle, Eric Thacker, Derek Scasta and Brady Allred
Publicity: Blayr Gourley, Derek Scasta, Diana Neumeyer, Josh Ketch and Kanten Klinger
Registration: Brandon Reavis, Colin Walden and Harry Fritzler
Sign Committee: Chris Hobbs, PJ Martin
Sponsorship: Jeff Henry, Corey Moffet and Karen Hickman
Student Activities: Will Moseley and Steven Smith
Trade Show: Jodie Stockett, Jack LeClair and Michael Johnson
Volunteer Committee: David McGough, PJ Martin and Lesley Carson
CREDITS

The 2013 Society for Range Management 66th Annual Meeting, Technical Training and Trade Show logo was created by The Noble Foundation’s Graphic Design Specialist, Katie Brown. Katie’s design was perfect for the 2013 SRM theme and slogan.

The 2013 Society for Range Management 66th Annual Meeting, Technical Training and Trade Show Program layout and design was created by Blayr Gourley.

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