

Conference Program



**Achieving Sustainable Mixed Agricultural
Landscapes in Grassland Environments
Oklahoma City, OK**

**A Special Conference hosted by
the Soil & Water Conservation Society**



**Soil and Water Conservation Society
945 SW Ankeny Road
Ankeny, IA 50023
515.289.2331
www.swcs.org**

The project was supported by the National Research Initiative of the USDA Cooperative State Research, Education and Extension Service, grant number #2008-35101-19160.

Farming with Grass:

Achieving Sustainable Mixed Agricultural Landscapes in Grassland Environments



A Note from the Program Committee...

Welcome to the Farming with Grass Conference. This conference was conceived as part of a 60th year celebration of the Grazinglands Research Laboratory. While anniversaries are a time for taking stock of where we are and from where we've come, more importantly they are a time for us to create a vision for where we want to be. Since the time that this conference was first conceived, there have been wild fluctuations in energy costs, commodity prices, and national and world financial

markets, as well as a growing awareness of our vulnerability to the dynamics of our climate system. Agriculture today is being uprooted from the assumptions of the past.

The overall goal of the conference is to address the changing economic, societal, and environmental background facing grassland agriculture today and in the future, including climate variability and change, energy costs and sources, market prices for commodity crops, demographics, the emerging bioenergy industry, and evolving markets for local foods. We encourage the participation of all attendees to identify scientific knowledge, technological capacity, and policy instruments needed to enhance the capacity of individual land owners, rural communities, researchers, and policy makers to evaluate alternative scenarios in terms of production, economic, social, and environmental criteria.

The program consists of a stellar group of invited and volunteered speakers and poster presenters to address issues facing grassland agriculture. The facilitated roundtable discussions will help us fill in gaps, target uncertainties, and build consensus as to how we can best meet the challenges facing grassland agriculture. The program has been grouped into the following five topic areas:

1. Status and trends in types of agricultural systems;
2. Environmental, social, and economic benefits of mixed grassland landscapes;
3. Factors driving changes in grassland environments;
4. Assessment tools for monitoring and predicting changes in grassland agricultural systems;
5. Science and policy needed to sustain agriculture in mixed grassland environments.

We thank you for joining us in this dialog. We hope that the exchange of ideas will produce ideas and strategies to build more sustainable grassland systems.

Jean L. Steiner
Conference Organizer

Alan J. Franzluebbers
Program Chair

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Program Committee:

- Jean L. Steiner, USDA-ARS (Conference Organizer)
- Alan Franzluebbbers, USDA-ARS (Program Chair)
- George Boody, Land Stewardship Project (MN)
- Marvin Burns, Langston University
- Miguel Cabrera, University of Georgia
- Craig Cox, Environmental Working Group
- Martin Entz, University of Manitoba
- Jurgen Garbrecht, USDA-ARS
- Andy Hopkins, Noble Foundation
- Jim Horne, Kerr Foundation
- Dewayne Johnson, Soil and Water Conservation Society
- George Peacock, USDA-NRCS, Central Region
- William Phillips, USDA-ARS
- David Porter, Oklahoma State University
- Jeanne Schneider, USDA-ARS
- Jeff Steiner, USDA-ARS, National Program Staff
- Brad Venuto, USDA-ARS
- Jason Warren, Oklahoma State University
- Larry Wright, Great Plains RC&D/NRCS

Local Arrangements and Monday Evening Dinner and Networking Event at the Grazinglands Research Lab:

- Mike Brown
- Susan Daughtry
- Eilene Gibbens
- Bill Jensen
- Pat Starks
- Clendon Tucker
- David Von Tungeln
- Bob Warren

Conference Sponsors and Exhibitors:

- Grazing Lands Conservation Initiative
- Noble Foundation
- National Center for Appropriate Technology (NCAT)
- Oklahoma Grazing Lands Conservation Association
- USDA – Agricultural Research Service (ARS)
 - Office of Technology Transfer
 - Grazinglands Research Lab, El Reno, OK
- USDA - Cooperative State Research, Education, and Extension Service (CSREES)
- USDA - Grazing Lands Conservation Effects Assessment Project (CEAP)

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Conference Schedule

October 20, 2008

2:00 PM Opening Plenary Session – All sessions are in the Century Ballroom

Moderator: Jean Steiner, USDA-ARS

Conference Welcome

Dr. Gale Buchanan

Under Secretary for Research, Education and Economics

U.S. Department of Agriculture

Keynote: Reconsidering Grass

Dr. Frederick L. Kirschenmann

Leopold Center for Sustainable Agriculture

4:00 PM ARS Grazinglands Research Laboratory, El Reno, OK

The Grazinglands Research Laboratory will host a dinner and networking event following the Opening Plenary Session.

Busses will leave from the front of the hotel at 4:00 p.m.

October 21, 2008

8:00 AM Topic 1:

Status and trends in types of agricultural systems, inputs, productivity, profitability, environmental indicators, and rural demographics and economics.

Moderator: Brad C. Venuto, USDA-ARS, El Reno, Oklahoma

Lead presentation – Current Status and Future Trends in American Agriculture: Farming with Grass

John Ikerd, University of Missouri

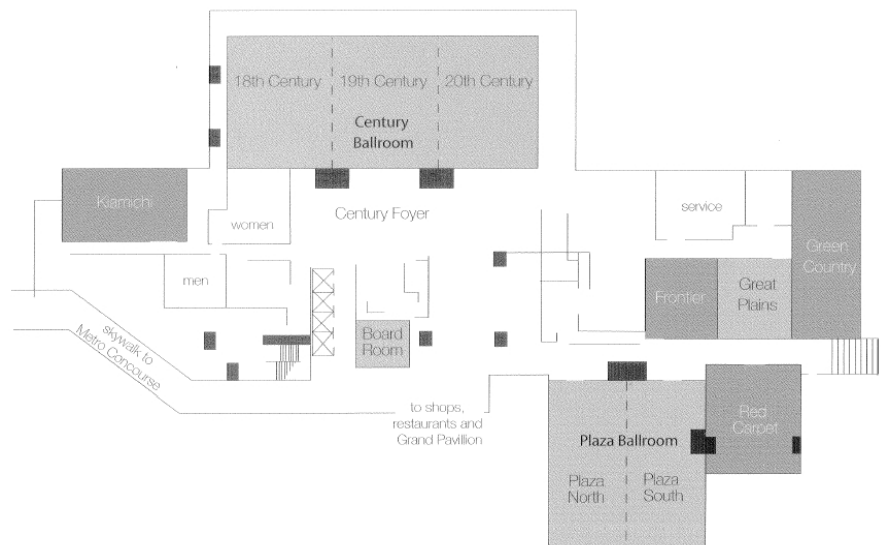
Perspective 1 – Toward a sustainable agriculture

Jon Hanson, USDA – Agricultural Research Service

Perspective 2 – Challenges and opportunities for forage based beef cattle production systems

William Phillips, USDA – Agricultural Research Service

**Sheraton
Oklahoma City**
**All sessions are in the
Century Ballroom**



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9:30 AM Break for viewing and discussion of posters on Topics 1 and 2

10:00 AM Topic 2:

Environmental, social, and economic benefits of mixed grassland landscapes to include farm level, rural community, and broad social perspectives.

Moderator: Larry Wright, USDA-NRCS, Great Plains RC&D, Cordell, OK

Lead presentation – Looking Forward: Adding to the Grasslands Mix

Deborah E. Popper, City University of New York

Frank J. Popper, Rutgers University

Perspective 1 – Case histories of grassfed market development in the Upper Midwest

Laura Paine, Wisconsin Department of Agriculture, Trade, and Consumer Protection

Perspective 2 – Managing forage and grazing lands for multiple ecosystem services

Matt Sanderson, USDA – Agricultural Research Service

11:30 AM Lunch & Moderated Roundtable Discussion of Topics 1 and 2

Moderator: Constance L. Neeley, Vice President for Advocacy and Global Initiatives, Heifer International

1:30 PM Topic 3:

Factors driving changes in grassland environments.

Moderator: Steven R. Shafer, USDA-ARS; Deputy Administrator, Natural Resources and Sustainable Agricultural Systems, Beltsville, MD

Lead presentation – Grassland environments: Factors driving change

Vivien Gore Allen, Thornton Distinguished Chair, Department of Plant & Soil Science, Texas Tech University

Perspective 1 – Cattle and trees don't mix!: Agri-environmental paradigms and silvopasture agroforestry

J. Gordon Arbuckle Jr., Iowa State University

Perspective 2 – Farming system changes in the prairie grassland ecoregions of Canada, 1991-2006

Ted Huffman, Agriculture and Agri-Food Canada

3:00 PM Break for viewing and discussion of posters on Topic 3

3:30 PM Moderated Roundtable Discussion of Topic 3

5:00 PM Reception for viewing and discussion of posters

Evening No scheduled activities

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October 22, 2008

8:00 AM **Topic 4:**

Assessment tools for monitoring and predicting changes in grassland agricultural systems and to support scenario analyses for evaluation of alternatives and tradeoffs.

Moderator: Evert Byington, USDA-ARS; National Program Leader; Rangeland, Pasture, and Forages, Beltsville, MD

Lead presentation – Managing Grassland Ecosystems under Global Environmental Change: Developing Strategies to Meet Challenges and Opportunities of Global Change

Dennis Ojima, Senior Scholar, The H John Heinz III Center for Science, Economics, and the Environment

Perspective 1 – Planning tools for multifunctional food, feed, and fuel cropping systems

Fred Iutzi, Western Illinois University

Perspective 2 – Development of a healthy farm index to measure and restore ecological, economic, and social function to organic and sustainable farms in Nebraska's four agroecoregions

John Quinn, University of Nebraska, Lincoln

9:30 AM **Break for viewing and discussion of posters on Topic 4 and 5**

10:00 AM **Topic 5:**

Science and policy needed to sustain agriculture in mixed grassland environments.

Moderator: Clarence E. Watson, Jr., Associate Director, Oklahoma Agricultural Experiment Station, Stillwater, OK

Lead presentation – Multifunctional Grass Farming: Science and Policy Considerations

George Boody, Executive Director, Land Stewardship Project

Perspective 1 – Outcomes of phosphorus-based nutrient management in the Eucha-Spavinaw watershed

Tommy Daniel, University of Arkansas

Perspective 2 – Sustainability in the Global Perspective: Policy Directions for a Resilient and Conservation-Based Agriculture

Jim French, Oxfam America

11:30 AM **Lunch & Moderated Roundtable Discussion of Topics 4 and 5**

1:30 PM **Closing Session**

Moderator: Peggie James, SWCS President and NRCS-TNC National Liaison

Closing Speaker

Jean Steiner, USDA-ARS, Laboratory Director, USDA-ARS Grazinglands Research Laboratory

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Guest Speakers:



Dr. Gale Buchanan received the B.S. and M.S. degrees in Agronomy from the University of Florida in 1959 and 1962, respectively, and the Ph.D. in Plant Physiology, with minors in Botany and Agronomy, from Iowa State University in 1965. Dr. Buchanan spent the first 21 years of his professional career with Auburn University in the Department of Agronomy and Soils, with primary teaching and research responsibilities in weed science. He served as Dean and Director of the Alabama Agricultural Experiment Station from October 1, 1980 to September 30, 1985. On April 14, 1986, he was appointed Associate Director of the Georgia Agricultural Experiment Stations and Resident Director of the Coastal Plain Experiment Station. He served as Interim Director of the Georgia Agricultural Experiment Stations from June, 1994 to February, 1995. He became Dean and Director of the College of Agricultural and Environmental Sciences March 1, 1995 up to 2006. Currently, he serves as the USDA-Under Secretary for Research, Education, and Economics.



Frederick L. Kirschenmann, a longtime leader in national and international sustainable agriculture, shares an appointment as Distinguished Fellow for the Leopold Center for Sustainable Agriculture at Iowa State University and as President of Stone Barns Center for Food and Agriculture in Pocantico Hills, New York. He also oversees management of his family's 3,500-acre certified organic farm in south central North Dakota and is a professor in the ISU Department of Religion and Philosophy. He served as the Leopold Center's second director from July 2000 to November 2005, when he was named a Distinguished Fellow. He joined the board of the Stone Barns Center in 2004 and was elected president in 2007. In January 2008, he assumed a half-time appointment at Stone Barns, dividing his time between Iowa and New York, to explore ways that rural and urban communities can work together to develop a more resilient, sustainable agriculture and food system.



Jean L. Steiner is the Director of the USDA-Agricultural Research Service Grazinglands Research Laboratory in El Reno, Oklahoma, where she conducts research related to climate variability and watershed processes. She received her B.A. in geology at Cornell College, Mt. Vernon, Iowa, and M.S. and Ph.D. degrees from the Evapotranspiration Laboratory in the Agronomy Department at Kansas State University. After a short post-doctoral assignment with CSIRO in Griffith, NSW, she joined ARS in 1983 and has worked as a researcher, research leader, and laboratory director at ARS locations in the Texas Panhandle, the Georgia Piedmont, and the Great Plains. She serves on the Board of Directors and is immediate past-President of the Soil and Water Conservation Society. She also has served as the Agroclimatology and Agronomic Modeling Division representative to the Board of the American Society of Agronomy.

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Lead Presentations:

George Boody is the Executive Director of the Land Stewardship Project, a nonprofit membership organization that works for environmental stewardship, social justice, support for family farmers, and healthful food. In addition to management and leadership responsibilities, George has directed two interdisciplinary projects utilizing collaborative teams of researchers, non-profits and farmers. The Monitoring Project measured the impacts of farms transitioning to rotational grazing. The Multiple Benefits of Agriculture initiative used modeling, and economic and social analyses to estimate the potential outcomes in watersheds from diversifying agriculture. During the past 30 years he has worked with farmers, government leaders, other professionals and citizens. He served as a certifier and on the board of the Organic Growers and Buyers Association in the 1970s and more recently on the Food Alliance Board of Directors. George received a Master's degree in Horticulture and Human Nutrition from the University of Minnesota and a Bachelors degree in Biology from the University of Minnesota. He has co-authored several publications, papers and book chapters.

Vivien Gore Allen is the Paul Whitfield Horn Professor and Thornton Distinguished Chair of forage and livestock systems at Texas Tech University. Allen is a native of Tennessee where she still owns and operates Feliciana Farms, a grass-based Angus cattle farm that has been in her family for over 100 years. She received the B.S. from the University of Tennessee, Martin, and the M.S. and PhD from Louisiana State University. Prior to coming to Texas Tech, she was a professor in the Department of Crop and Soil Environmental Sciences at Virginia Tech in Blacksburg. Allen has published over 80 referred journal articles and trained over 30 graduate students. She is a former president of the American Forage and Grassland Council and the Crop Science Society of America and was chair of the Continuing Committee for the International Grassland Congress. She is a Fellow in the Crop Science Society of America, the American Society of Agronomy, and the American Association for the Advancement of Science.

John Ikerd, Professor Emeritus of Agricultural Economics, University of Missouri, Columbia. John was raised on a small dairy farm in southwest Missouri and received his BS, MS, and Ph.D. degrees in agricultural economics from the University of Missouri. He worked in private industry for a time and spent thirty years in various professorial positions at North Carolina State University, Oklahoma State University, University of Georgia, and the University of Missouri before retiring in early 2000. Since retiring, he spends most of his time writing and speaking on issues related to sustainability with an emphasis on economics and agriculture. Ikerd is author of *Sustainable Capitalism*, *A Return to Common Sense*, *Small Farms are Real Farms*, and *Crisis and Opportunity: Sustainability in American Agriculture*.

Dennis Ojima is currently a Senior Scholar at the H. John III Center for Science, Economics, and the Environment. He is also a Senior Research Scientist of the Natural Resource Ecology Laboratory (NREL) at Colorado State University where he was Interim Director from 2005 to 2006. Dr. Ojima received his BA and Masters Degree in Botany from Pomona College (1975) and the University of Florida (1978), and his PhD from the Rangeland Ecosystem Science Department at Colorado State University in 1987. His current US research contributes to the North American Carbon Project. His research areas include global change effects on ecosystem dynamics and regional climate change assessment for the Central Great Plains, as well as international efforts in Central Asia,

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Mongolia, and China. His research with the Chinese Academy of Sciences includes development of Regional Carbon Management. Dr. Ojima is also member on the U.S. National SCOPE Committee and member-at-large on the Governing Board of the Ecological Society of America (2005-2007).

Deborah E. and Frank J. Popper: Deborah is professor of geography at College of Staten Island/CUNY, acting director of the Macaulay Honors College at CSI, and a member of CUNY's graduate faculty in Earth and Environmental Studies. She teaches regularly in the Environmental Studies program at Princeton University. Frank teaches in the Bloustein School of Planning and Public Policy at Rutgers University, where he also participates in the American Studies, Geography, Human Ecology and Political Science Departments. He teaches regularly as a visiting professor in the Environmental Studies Program at Princeton University, where he is on leave for the academic year 2008-2009.

Their article "The Great Plains: From Dust to Dust" (Planning, December 1987), put forward the controversial Buffalo Commons idea that touched off a national debate on the future of the depopulating rural parts of the Great Plains region. The Poppers' Plains work was the subject of Anne Matthews' book *Where the Buffalo Roam* (1992), one of four finalists for the 1993 Pulitzer Prize for Nonfiction, and the book appeared in a second edition in 2002. Their ideas have been featured in documentary films such as "Dreams Turn to Dust" (1994), "The Fate of the Plains" (1995), and "The Buffalo Commons: The Return of the Buffalo" (2008). The Poppers are now at work on a book explaining how regional decline can mean national opportunity.

Perspective Presentations:

J. Gordon Arbuckle, Jr. is assistant professor and extension sociologist with Iowa State University. His primary area of interest is agriculture and natural resources, and his research and extension efforts focus on improving the environmental and social performance of agricultural systems. He is particularly interested in perennial-livestock systems as a means toward ecological and economic diversification of agricultural landscapes, and serves as project evaluator for the Iowa Grass-Based Livestock Working Group. In addition to his academic and extension pursuits, J. manages his family's farm in Columbia, MO, where he has over the last five years established a grazing system for their small cow-calf operation.

T.C. Daniel, Department of Crop, Soil and Environmental Sciences, University of Arkansas, Fayetteville, AR. Training. Reared on farm/ranch in Central Texas (Heidenheimer) accompanied by degrees from Texas A&M (1963 BS Agronomy) and the University of Wisconsin (1972 Ph.D Soils/water-chemistry). Employment. Univ. of AR - 1989 to Present (Professor); Univ. of WI 1973-1989 (Asst./Assoc/Professor). Research/Extension Interest. Evaluating the effect of agricultural nonpoint runoff on water quality with special attention on phosphorus loading and eutrophication, developing/implementing innovative BMPs, and developing stakeholder educational programs.

Jim French, a fifth-generation farmer and rancher, grew up in Reno County, Kansas. He farms land homesteaded by his great-great grandparents in 1871. He and his wife, Lisa, took over management of the operation in 1979. Their operation has received national and regional recognition and awards for conservation and innovation. Jim and Lisa have

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been dedicated volunteers in their community, and in state organizations. Both have served on numerous church, county, extension, and state committees. In 2005, French scaled back his farming and ranching activities in order to take a position as the Lead Organizer in the Agriculture Campaign at Oxfam America. Oxfam is an international development agency that focuses primarily on addressing hunger and poverty in the world's poorest nations. In his work, French advocates for policies that can diminish trade distortion, create a fairer marketplace for producers worldwide, and support a more sustainable and dynamic agriculture here and abroad.

Dr. Jon Hanson is the Research Leader and a Supervisory Rangeland Scientist of the Northern Great Plains Research Laboratory in Mandan, North Dakota. He received his Ph.D. in Range Science from Texas A&M University in 1979. Jon began his career with ARS in 1979 at the High Plains Grassland Research Station in Cheyenne, Wyoming. The bulk of his career was spent in Fort Collins, CO where he continued to work in both range and crop land agroecosystems. Jon's goal has been to contribute toward the development and implementation of sustainable and adaptive management systems for agriculture and natural resources. His work has led to the development and implementation of simulation models and decision support tools including SPUR, SPUR2, RZWQM, RZWQM98, GPFARM, and the Crop Sequence Calculator. He is a member of the Society for Range Management, the Agronomy Society of America, the Crop Science Society of America, and the Soil Science Society of America. In 2004, he graduated from the ARS PEAK training program and in 2006 he received an NPA Mentor of the Year Award.

Edward (Ted) Huffman is a research scientist in land evaluation, with experience in land cover, land use and land management analysis at the field, farm, regional and national levels. He has undergraduate degrees in Agriculture and Geography and a Ph.D. in Remote Sensing from Waterloo University. His work with Research Branch of Agriculture Canada involves the creation of technologies for the development of datasets and the characterization of farming systems, agricultural land use, land use change and land management practices. The data is primarily applied in large, multidisciplinary projects related to policy and program strategies for mitigation of GHG, assessing the environmental implications of the bio-economy, reporting on national carbon and GHG sources and sinks, monitoring the health of soil, air and water through national indicators and assessing the impact of agriculture on wildlife habitat. He has served on the Environmental Indicators program of the OECD and on the Good Practice Guidance of the IPCC and is currently leading Canada's Agricultural Land Use and Management Team reporting to the United Nations Framework Convention on Climate Change. His research work relates to the integration of land cover data with other spatial and statistical data types to interpret land use and on developing farm-level models of land use change. Dr. Huffman has made presentations at conferences around the world and his publication list includes over 60 scientific and technical papers.

Frederick W. Iutzi coordinates a range of agriculture and renewable energy programming for the Illinois Institute for Rural Affairs at Western Illinois University (WIU). He holds a MS in Sustainable Agriculture and Agronomy from Iowa State University (2006) and an AB in Geography from the University of Missouri-Columbia (2001). Previous roles include alternative crops agronomist with the WIU Department of Agriculture and on-farm research specialist with Practical Farmers of Iowa. Iutzi's interests include systems agronomy, perennial and multiple cropping systems, integrated renewable energy development, and participatory research methods.

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Laura Paine, Grazing & Organic Agriculture Specialist for the Wisconsin Department of Agriculture, Trade and Consumer Protection, provides economic, business and market development education and assists producers in developing and marketing organic and grass-fed products. Current projects include establishing a statewide grass-fed beef marketing cooperative and coordinating a \$148,000 SARE research grant investigating grass-fed milk and dairy products. Paine has extensive knowledge in both the grazing and organic sectors. She coordinates and advises several private sector advisory councils and teams including the GrassWorks Board of Directors and the Wisconsin Organic Advisory Council. Paine has been a guest speaker at the Wisconsin Grazing Conference and the Upper Midwest Organic Farming Conference, and authored a chapter on pasture management in *Organic Dairy Farming: A Resource for Farmers*. She and her husband raise grass-fed beef on their farm near Columbus, Wisconsin.

Bill Phillips is a native of Tennessee, born and reared on a diverse livestock and crop farm. He received his BS Degree in Agriculture from Middle Tennessee State University. Both of his advance degrees are in Ruminant Nutrition and were earned at Virginia Tech under the guidance of Dr. Kenny Webb. Bill joined ARS after graduate school and was the third ARS Scientist to be located at the Fort Reno Livestock Research Station, which would later become the Grazinglands Research Laboratory (GRL). Bill has been a Research Scientist at the GRL for 32 years and served as the Laboratory Director for 9 years. His research program has quantified the amount of stress imposed on beef calves during the assembly, transport and post-transit periods, developed nutritional and management practices to improving the conversion of forages to body weight gain by beef and sheep. He and a team of ARS and State scientists were able to develop management practices that decreased stress and improved performance of beef cattle shipped to the southern Great Plains for grazing or finishing and decreased the economic risk associated with grazing sheep and cattle on winter wheat. Bill is member of the American Society of Animal Science, International Goat Association, and American Registry of Professional Animal Scientists.

John E. Quinn is a graduate research assistant in the School of Natural Resources, University of Nebraska-Lincoln working towards his doctorate in natural resources with a specialization in applied ecology. John is interested in exploring environmental concerns within biodiversity and sustainability, agroecology, avian ecology, and the role of birding as a medium for environmental awareness and education. His current research explores how organic agricultural landscapes can be structured and managed to maintain production while enhancing ecosystem services and conserving biodiversity. This data will be used to develop an initial index of farm health. John received a B.S. in Environmental Science and a B.A. in Environmental Policy from Drake University and a MS in Biology from the University of Louisiana at Monroe.

Matt A. Sanderson is a Research Agronomist with the USDA-ARS Pasture Systems and Watershed Management Research Unit in University Park, PA and adjunct professor in the Crop and Soil Science Department at the Pennsylvania State University. He earned his B.S. and M.S. degrees from North Dakota State University, and his Ph.D. from Iowa State University. Dr. Sanderson's research focuses on forage management, grazing land ecology, and warm-season grasses for bioenergy. He has authored or co-authored more than 100 peer-reviewed scientific papers along with more than 200 abstracts, book chapters, proceedings papers, and popular press articles.

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Facilitator:

Constance L. Neely is a facilitator for sustainable development, sustainable agriculture and rural development, and holistic, people centered and multi-stakeholder approaches. She holds a Ph.D. in agroecology and is a Certified International Facilitator and Holistic Management Educator. She will soon be joining Heifer International as the Vice President for Advocacy and Global Initiatives. Her most recent work with Holistic Management International, Heifer International and the Food and Agriculture Organization (FAO) has focused on the nexus of land-livestock-livelihoods in light of climate change. Constance has served as a visiting expert and senior consultant to the UN FAO in Rome over the last ten years in participatory sustainable land management, sustainable agriculture and rural development, sustainable livelihoods, and a facilitator of electronic and face-to-face multi-stakeholder dialogues and global, regional and national strategic planning and training efforts on sustainable agriculture, land and water related topics. From 1992 until 2003, she was the Deputy Director of the Sustainable Agriculture and Natural Resources Management Collaborative Research Support Program (SANREM CRSP) funded through the USAID and working in Asia, Africa and Latin America. She is the past president and a current board member of the International Farming Systems Association and serves on the International Landcare Committee and Global Livestock Working Group. Constance is from Atlanta, Georgia and is a co-founder of Kalani Organica Coffees and Teas in Seattle, Washington and Hallowed Hawk Farms in Watkinsville, Georgia, USA.

Conference CEUs:



The following CEUs have been pre-approved for the conference:

Certified Crop Advisor CEUs

www.certifiedcropadviser.org

Monday 20 Oct 2008

2 hours Soil and Water Management +
2 hours Professional Development

Tuesday 21 Oct 2008

4.5 hours Soil and Water Management
+ 4 hours Crop Management

Wednesday 22 Oct 2008

2.5 hours Soil and Water Management
+ 2.5 hours Crop Management + 0.5
hours Professional Development

Certified Professional in Range Management CEUs

www.rangelands.org

16 total hours (M - 3 / T - 8 / W - 5)

AFGC's Certified Grassland Professional program:

www.afgc.org

This program has been pre-approved for 16 CEUs.

The American Registry of Professional Animal Scientists (ARPAS) www.arpas.org

This program has been pre-approved for 15 CEU's for ARPAS members in attendance.

If you are interested in earning credit for other CEU programs at this conference, please contact Dewayne Johnson at dewayne.johnson@swcs.org.

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Poster Presentations:

	#	Title	Author(s)
1. Status and trends	1	Carbon sequestration and storage in selected grass monocultures	Larry J. Cihacek and Dismas Macha, North Dakota Univ., Larry.Cihacek@ndsu.edu
	2	Grasslands and Groundwater: What's the Connection?	John A. Daniel, USDA-ARS, Grazinglands Research Laboratory; John.Daniel@ars.usda.gov Brad Venuto, USDA-ARS, Grazinglands Research Laboratory: Brad.Venuto@ars.usda.gov Thomas Lucas, USDA-NRCS, RC&D
	3	Getting It Right The First Time - Simple	David N. Findley, USDA-NRCS, david.findley@sc.usda.gov Don Wardlaw
	4	Developing a Poultry Litter Incorporator to Minimize Nutrient Losses from Perennial Grassland	Dan Pote, USDA-ARS, dan.pote@ars.usda.gov Tom Way, USDA-ARS, tom.way@ars.usda.gov Karamat Sistani, USDA-ARS, karamat.sistani@ars.usda.gov Philip Moore, Jr., USDA-ARS, philip.moore@ars.usda.gov
	5	Sustainable Forage Production in the Southern Great Plains Utilizing Swine Effluent as a Nutrient Source	J. Clemn Turner, Oklahoma State University, clemn.turner@okstate.edu; Jeff A. Hattey, Oklahoma State University, jeff.hattey@okstate.edu
2. Environmental, social, and economic benefits	6	Bermuda grass as an alternative for retired farmland in the western San Joaquin Valley of California	Maximo Alonso, University of California, Davis, malonso@ucdavis.edu Stephen Kaffka, University of California, Davis, srkaffka@ucdavis.edu Dennis Corwin, George E. Brown Jr. Salinity Laboratory, dcorwin@@ussl.ars.usda.gov
	7	Utilization of Solar Powered Watering Systems on Grazing Farms in Pennsylvania	Bobbi Bailey, USDA Natural Resources Conservation Service, bobbi.bailey@pa.usda.gov
	8	Silvopasture - How to get it right the first time. Can bobwhite quail, cattle and timber production be managed	David N. Findley, USDA-NRCS, david.findley@sc.usda.gov Don Wardlaw Jerald Sholar
	9	Workshop Series for Southern Arizona Grass Fed Meat Producers	R. Dean Fish, University of Arizona Cooperative Extension, dfish@ag.arizona.edu and Donna J. Matthews, Coronado Resource and Conservation Area, donna.matthews@az.usda.gov
	10	Soil quality under mixed grassland - cropland environments	Alan J. Franzluebbbers, USDA-ARS, Alan.Franzluebbbers@ars.usda.gov
	11	Capital Gains on Grass	June C. Grabemeyer, Agricultural Economist, NRCS, USDA june.grabemeyer@mi.usda.gov Terri Hawbaker, Grazeway Farm, grazeway@yahoo.com
	12	Precision Prairie Reconstruction (PPR): An Alternative Method for Increasing Species Richness in Grasslands	Dr. Carolyn E. Grygiel, North Dakota State University, carolyn.grygiel@ndsu.edu
	13	Effects of a winter rye cover crop after corn silage on water quality, soil nutrient status, and biomass production	Erik Krueger, University of Minnesota, krueg226@umn.edu Tyson Ochsner, USDA-ARS, ochsner@umn.edu Paul Porter, University of Minnesota, pporter@umn.edu Donald Reicosky, USDA-ARS, Don.Reicosky@ARS.USDA.GOV John Baker, USDA-ARS, j baker@umn.edu

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2. Environmental, social, and economic benefits	14	Farm-level costs and benefits of promoting plant functional group diversity in grazing systems	Herika Kummel, University of Wisconsin-Madison, hkummel@wisc.edu Julie E. Woodis, University of Wisconsin- Madison, jedoll@wisc.edu Randall D. Jackson, University of Wisconsin-Madison, rdjackson@wisc.edu
	15	N Fertilizer for Grass Pastures -- How Much is Environmentally Too Much?	L.B. Owens, USDA-ARS, lloyd.owens@ars.usda.gov J.V. Bonta, USDA-ARS, jim.bonta@ars.usda.gov M.J. Shipitalo, USDA-ARS, martin.shipitalo@ars.usda.gov D.J. Barker, Ohio State University, barker.169@osu.edu S.C. Loerch, Ohio State University, loerch.1@osu.edu
	16	Profitability of Certified Organic Grass-finished Beef in Montana	Jeff Schahczenski, National Center for Appropriate Technology, Jeffs@ncat.org
	17	Patch-Burn Grazing in the Bluestem Flint Hills and the Central States	Jane Koger and Marva Weigelt, Ranchers in the Bluestem Flint Hills Tallgrass Prairie, Matfield Green, Kansas, Cheryl Simmons, Natural Resources Specialist, NRCS Central National Technology Support Center, Fort Worth, TX, Reggie Blackwell, Grasslands Specialist, NRCS Central National Technology Support Center, Fort Worth, TX, cheryl.simmons@ftw.usda.gov
	18	Soil and herbaceous effects of management intensive grazing systems	Richard Teague r-teague@tamu.edu Shannon Gerrard Steve Dowhower Nathan Haile
	19	Estimating bioenergy feedstock potential of red cedar in western Oklahoma	Brad Venuto*1, John Daniel1, Pat Starks1 and Tom Lucas2 1USDA-ARS-GRL, El Reno, OK, brad.venuto@ars.usda.gov 2NRCS, RC&D, Buffalo, OK
	20	The Use of Complementary Forages in a Reproductive Beef Cattle Operation	John L. Launchbaugh, (retired) Bob Welling (Presenter), Research Support Manager, Ridley Block Operations, bwelling@ridleyinc.com
	21	Sustaining Small- and Medium-sized Farms, Rural Communities, and Natural Resources in the Northeast: The Role of Rotational Grazing	Jonathan Winsten, Winrock International and University of Vermont, JWinsten@winrock.org
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	23	Incorporating grasslands into cropping systems: What are the keys?	J.R. Hendrickson, Northern Great Plains Research Laboratory, USDA-ARS, john.hendrickson@ars.usda.gov J.D. Hanson, Northern Great Plains Research Laboratory, USDA-ARS, jon.hanson@ars.usda.gov
	24	Yield Stability And Grazing Preference Of Warm Season Perennial Grasses With Biofuel Production Potential	The Samuel Roberts Noble Foundation James Rogers, Ph.D., Pasture and Range Specialist, jkrogers@noble.org James Pitman, Pasture and Range Intern Frank Motal, Research Associate, fjmotal@noble.org Chan Glidewell, Research Associate, bcglidewell@noble.org
	25	Jumpstart land	Rodger R. Savory, roddersavoryranching@yahoo.com
	26	Biofuels from Urban Landscapes	Tim Springer, USDA-ARS-SPRRS, Woodward, OK, tim.springer@ars.usda.gov
	27	Response of a shortgrass prairie and a Conservation Reserve Program grassland to applied feedyard manure	Richard W. Todd richard.todd@ars.usda.gov N. Andy Cole, andy.cole@ars.usda.gov R. Nolan Clark, nolan.clark@ars.usda.gov USDA-ARS, Conservation and Production Research Laboratory, Bushland, TX

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	29	Seasonal Growth and Nutritive Quality Distribution of 7 Warm Season Perennial Grasses in the Texas Rolling Red Plains	Robert Ziehr, Plant Materials Specialist, USDA-NRCS, robert.ziehr@tx.usda.gov; Rudy Esquivel, Soil Conservationist, USDA-NRCS, rudy.esquivel@tx.usda.gov; Ken Spaeth, USDA-NRCS, Central National Technology Support Center, ken.spaeth@ftw.usda.gov; George Peacock, USDA-NRCS, Central National Technology Support Center, george.peacock@ftw.usda.gov Arnold Norman, USDA-NRCS, Central National Technology Support Center, arnold.norman@ftw.usda.gov
	30	Using the C-Lock? Agriculture System to Conduct a Lifecycle Analysis to Assess the Soil Carbon and Greenhouse Gas Benefits of Switchgrass	Sarah Mason, C-Lock Technology Inc., smason@c-locktech.com Patrick Zimmerman, C-Lock Technology Inc., pzimmerman@c-locktech.com Karen Updegraff, C-Lock Technology Inc., kupdegraff@c-locktech.com
	31	Using SWAT and MODFLOW Models to Quantify the Impact of Converting Cropland to Perennial Grasses on Water Quality	Daniel N. Moriasi; USDA-ARS Grazinglands Research Laboratory; daniel.moriasi@ars.usda.gov Patrick J. Starks; USDA-ARS Grazinglands Research Laboratory; patrick.starks@ars.usda.gov Jean L. Steiner; USDA-ARS Grazinglands Research Laboratory; jean.steiner@ars.usda.gov John A. Daniel; USDA-ARS Grazinglands Research Laboratory; john.daniel@ars.usda.gov
	32	Management effects on soil characteristics of two pasture types in Oklahoma	Brian K. Northup, USDA-ARS Grazinglands Research Laboratory, brian.northup@ars.usda.gov John A. Daniel, USDA-ARS Grazinglands Research Laboratory, john.daniel@ars.usda.gov William A. Phillips, USDA-ARS Grazinglands Research Laboratory, bill.phillips@ars.usda.gov
	33	Utilizing Ecological Sites to Assess Rangeland Health	Homer Sanchez, USDA-NRCS, Central National Technology Support Center, homer.sancez@ftw.usda.gov George Peacock, USDA-NRCS, Central National Technology Support Center, george.peacock@ftw.usda.gov
	34	Progress Report: Meeting the Needs of Small Agriculture in the Plains? for Climate and Weather Information	Jeanne M. Schneider, USDA ARS Grazinglands Research Laboratory, jeanne.schneider@ars.usda.gov John D. Wiener, Environment and Society Program, Institute of Behavioral Science, University of Colorado John.Weiner@colorado.edu
	35	USDA-NRCS Field Protocols for Range and Pastureland National Resource Inventory	Kenneth E. Spaeth Jr. USDA-NRCS ken.spaeth@ftw.usda.gov Leonard Jolley, USDA-NRCS Leonard.Jolley@wdc.usda.gov
	36	Evaluating a wheat grazing model for managing wheat grain and beef production	X-C. Zhang, USDA-ARS Grazinglands Res Lab, john.zhang@ars.usda.gov Y-Y. Sui, W.A. Phillips, G.W. Horn, J. Edwards, and H.L. Zhang



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