



**Today's Rangeland Management:
Integrating Science, Practices, Partnerships and Policy**

January 24-25, 2013 - UC Davis Freeborn Hall - Davis, California
2nd UC Davis Rangeland Science Symposium & 8th Annual Summit

Full Agenda

January 24, 2013

7:30	REGISTRATION OPENS
9:00	<p>Welcome & Program Overview <i>Ken Tate, Ph.D., Professor, UC Davis</i> <i>Barbara Allen-Diaz, Ph.D., Vice President UC ANR – Master of Ceremonies</i></p>
SESSION I: INTEGRATING SCIENCE AND PRACTICE	
9:30	<p>Ranching and Rangeland Management in Complex Settings <i>Mark Eisele, King Ranch - Cheyenne, Wyoming</i></p> <p>Mark Eisele of the King Ranch—which borders Cheyenne, Wyoming—faces a diversity of challenges and opportunities in his operation. Mark has worked extensively with the City of Cheyenne on a variety of land management activities including wind energy, recreation, and development. Additionally, Mark holds a grazing permit on the USFS Pole Mountain allotment, which experiences some of the highest public recreational use in the region. Mark will share some of his experiences in balancing many of these issues with traditional cattle production challenges (e.g., drought, fluctuating markets). Mark is a leader in industry, serving as President of the Wyoming Stock Growers Association; and a is regular collaborator with the USDA-ARS High Plains Grassland Research Station –providing cow-calves and yearling steers for multiple, long-term research projects.</p>
10:00	<p>Collaborative Partnerships for Long-Term Stewardship <i>Dave Pellatz, Thunder Basin Prairie Grasslands Ecosystem Association</i></p> <p>In 1999, landowners in the Thunder Basin Grasslands of northeastern Wyoming came together to address multiple land management concerns across 945,000 acres of mixed rangeland ownership (private, BLM, USFS, and state lands). Of particular interest were management activities related to ranching, coal, coal-bed methane, oil, and gas production and their influences on wildlife species of concern. The Ecosystem Association was established with the objective of maintaining responsible economic use of the landscape while demonstrating how effective natural resources stewardship can be provided through voluntary, collaborative efforts. Dave grew up on the Thunder Basin and serves as the Project Manager for the Thunder Basin Grasslands Prairie Ecosystem Association and as Range Manager for the Thunder Basin Grazing Association.</p>
10:30	BREAK
11:00	<p>Sustaining Ecosystem Services on Working Rangelands <i>Leslie Roche, Department of Plant Sciences, UC Davis</i></p> <p>Working directly with ranching communities in California, Wyoming, and Colorado, the California Rangeland Watershed Laboratory is leading and partnering on multiple interdisciplinary collaborations to integrate management expertise, ranch-scale research, and existing research information to identify and extend practical grazing options to optimize interdependent agricultural, economic, and ecological services. Leslie will give an overview of some of these original research projects and discuss new opportunities for stakeholders to become involved.</p>

<p>11:30</p>	<p>A Triangular Approach To The Adaptive Management Circle <i>Lynn Huntsinger, Ph.D., UC Berkeley</i></p> <p>Relationships between land management agencies and the public are considered key to making decisions and even conducting science for resource management. Management models for forests and rangelands have evolved to include multiple uses, public participation, and now, adaptive management. Relationships between land management agencies and the public are considered key to making decisions and even conducting science for resource management. But is there a third step on the horizon? Lynn will cover several new and exciting examples of a triangular approach to natural resource management, including the Sierra Nevada Adaptive Management Project. These triangular approaches integrate the land management agency, the public, and monitoring or research providers.</p>
<p>12:00</p>	<p>LUNCH</p>
<p>SESSION II: THE SCIENCE AND PRACTICE OF MANAGING RANGELAND WATERSHEDS</p>	
<p>1:30</p>	<p>On-Ranch Conservation Practice Implementation and Effectiveness <i>David Lewis, Watershed Management Advisor, UC Cooperative Extension</i></p> <p>On-ranch conservation practice implementation is a critical approach to striking natural resource stewardship and farm and ranch viability solutions. Participating ranchers, technical and financial assistance agencies, and other community-based organizations make up a conservation partnership that has made significant investment of time and money to this endeavor. This partnership experiences limited resources for follow-up and monitoring of past restoration and conservation projects, monitoring that facilitates learning from past experiences and improving future efforts. To realize this opportunity, David has collaborated with Resource Conservation Districts, Natural Resources Conservation Service, and private landowners to conduct novel, science-based solutions for documenting on-ranch conservation practice implementation and effectiveness.</p>
<p>2:00</p>	<p>Managing Rangeland Watersheds for Agricultural Production, Water Quality, and Food Safety <i>Rob Atwill, Ph.D., School of Veterinary Medicine, UC Davis</i></p> <p>Microbial pollution continues to be a primary topic of water quality and food safety concern in California's diverse watersheds. Within these watersheds, working rangelands are a critical source of drinking and irrigation water while also supporting the state's multi-billion dollar livestock industry. Rob will discuss the latest research from across California examining sources and mitigation practices for pathogens such as <i>E. coli</i> O157:H7, <i>Cryptosporidium parvum</i>, and <i>Salmonella</i>. Recent research on the prevalence of these pathogens in wildlife and livestock will be shared. Practical management strategies to protect water and crops, and achieve livestock production goals will also be illustrated.</p>
<p>2:30</p>	<p>Feral Swine in California: An invasive ecological and agricultural assassin, bioterroristic petri dish, and game mammal <i>Dennis Orthmeyer, USDA-APHIS California Wildlife Services - State Director</i></p> <p>As California's population continues to grow, there will be increasing interactions, both positive and negative, between the state's residents and wildlife. One of the most complicated issues in California is feral swine. Today California is home to a large, well established population of feral swine. The number of animals is often estimated between 200,000 and two million individuals. This generalist species is at home in many of our state's ecosystems and readily makes use of our abundant agricultural crops. The CA Department of Fish and Game sells between 55,000 and 60,000 feral swine harvest tags each year. Hunting guides may charge up to \$300 - \$2,500 per pig per hunt. Every day, California Wildlife Services (WS) works to protect agricultural, property, natural, and human resources from threats posed by wildlife including feral swine. Over the last 5 years, WS has received a 43% increase in calls for assistance dealing with feral swine damage. WS has taken a lead</p>

	role in feral swine damage management, as well as, the monitoring for diseases that may pose threats to human safety, other wildlife species, domestic pets, and livestock. USDA Wildlife Services' National Wildlife Disease Program conducts surveillance targeted at detecting the multitude of zoonotic and foreign animal disease potentially carried by feral swine including foot and mouth disease and classical swine fever.
3:00	BREAK
SESSION III: OUTLOOK ON RANGELAND SCIENCE AND POLICY	
3:30	Ecological Values of Conservation Practices and Investments <i>Wendell Gilgert, PRBO Conservation Science</i> PRBO Conservation Science has launched a new Rangeland Watershed Initiative to conserve and re-water multifunctional agricultural landscapes to both enhance rangeland health and sustain migratory bird habitat across Sacramento Valley foothill watersheds. Under the Watershed Enhancement Program, PRBO Conservation Science has partnered with NRCS conservationists and landowners to expand prescribed rangeland management practices and watershed habitat restoration projects; they have also partnered with the UC Davis California Rangeland Watershed Laboratory to evaluate the effectiveness of these practices in enhancing biodiversity, wildlife habitat, and soil and hydrologic health.
4:00	Addressing Challenges in Translating Science into Effective Rangeland Policy <i>Karen Ross, Secretary of Agriculture, CDFA</i> Science is utilized, referenced, taken for granted and even discredited in the political process. Secretary Ross will share her experiences in the value of research provided by the University of California and others in outlining policies and regulations that affect agriculture, specifically rangelands. Secretary Ross's experience working for an agricultural trade organization, United States Department of Agriculture and now, leading the California Department of Food and Agriculture will provide an outlook on the value and importance of science conducted in concert with ranchers to establish sound policies that promote the economic viability of ranchers and the health of our state's natural resources.
4:30	CLOSING REMARKS <i>Barbara Allen-Diaz, Ph.D., Vice President UC ANR – Master of Ceremonies</i>
4:45	RECEPTION, POSTER SESSION, PHOTO CONTEST
7:00	CONCLUSION

January 25, 2013

6:30	Registration Opens
7:00	Breakfast with California's Grazing Lands Conservation Initiative – <i>More details coming soon. There will be limited seating, must confirm participation at registration.</i>
9:00	Welcome: Welcome – <i>Chet Vogt, 2012 Chair, California Rangeland Conservation Coalition</i> Master of Ceremony – <i>Sheila Barry, University of California Cooperative Extension</i> Networking Opportunity

Session IV: Internal and External Reflection on Rangeland Conservation**9:15 Why an Environmentalist Cares about Critters AND Cowboys?**

Kim Delfino, California Program Director, Defenders of Wildlife

Hear an environmentalist's perspective about why working rangelands can be important for achieving conservation goals and how that perspective evolved through the development of science demonstrating the benefits of managed grazing. Kim will also share her continued passion and support for the overarching goals of the California Rangeland Conservation Coalition, including where the group has been and where they are going.

9:30 Targeted Grazing – Accomplishing Conservation by Breaking Barriers Between Science and Experience

Karen Launchbaugh, Director of the Rangeland Center at the University of Idaho

Today, livestock grazing is being rediscovered and honed as a viable and effective tool to address contemporary vegetation management challenges, like controlling invasive exotic weeds, reducing fire risk in the wildland-urban interface, and finding chemical-free ways to control weeds in organic agriculture. The challenge of converting livestock grazing from a ubiquitous land use into a powerful vegetation shaping tool requires a paradigm shift for both land managers and livestock producers.

Bridging the gap between science and experience is at the heart of crafting successful targeted grazing endeavors. Karen will discuss her efforts to unite knowledge from herders and scientists to sharpen livestock grazing into a powerful land management tool. She will share how the idea of bringing scientists and practitioners together has created a new model for rangeland education and research at the University of Idaho based on collaboration and shared knowledge. Lastly, she will share her experiences working with the Idaho Rangeland Resources Commission to build a bridge toward economically productive and healthy rangelands.

10:15 Break**SESSION V: Grazing for Weed Management****10:40 Testing Management Tools for Controlling Rangeland Weeds**

Josh Davy, livestock and natural resources advisor, University of California Cooperative Extension

The age old challenge of invasive weeds continues to hinder rancher's economic viability and negatively impact natural resources. Learn what the success and limitations are to recent innovative practices to manage invasive weeds on annual rangelands. Josh will also share about his cooperation with public agencies to manage weeds to enhance wildlife habitat and working with ranchers to improve forage value and natural resources on private rangelands.

11:00 Meeting Public Land Objectives on the Sacramento River NWR with Managed Grazing

Kelly Moroney, Sacramento River Wildlife Refuge Manager, U.S. Fish and Wildlife Service.

US Fish and Wildlife Service in California grazes a significant portion of their lands to improve habitat to benefit birds, wildlife and plants. Kelly will share with you the grazing program on the Sacramento Valley Refuge to reduce fire fuel loads, control invasive weeds and promote special status species. Learn about their overall program all the way down to specific units and the species that are benefiting from livestock herbivore, along with managing cattle interaction with public recreation.

11:20 Grass to Beef

Tony Turri, Turri Family Farms

	<p>The in's and out's of a grass fed, grass finished direct to consumer family ranching operation located in Tehama County. Tony will share with you his management strategies, including rotational grazing and the by-products of his ranching – wildlife. Learn about the opportunities, challenges and limitations to the Turri Family Farms cattle grazing lease on a nearby US Fish and Wildlife Service refuge.</p>
11:40	Question & Answer Session for Grazing for Weed Management Session
12:00	Lunch
SESSION VI : Partnerships for Conservation Practices	
1:00	<p>Getting Paid to Graze – Value of Targeted Grazing with Sheep <i>Dan Macon, Flying Mule Farm</i></p> <p>Learn how sheep are doing everything from producing food and fiber to reducing fire fuel loads and promoting habitat for special status species. Dan will discuss his work with nonprofit groups, government agencies and private landowners to provide land management and ecological restoration services, with livestock as the primary tool. Learn about his targeted grazing practices and the marketing of his lamb through various venues.</p>
1:30	<p>Ranchers Bottom-line Improves with Investment in Conservation <i>Bev Sparrowk, Sparrowk Livestock</i></p> <p>Sparrowk Livestock based in Clements, Calif. operates on 85,000 acres of private and public lands. 1st generation rancher Bev Sparrowk will share her family's ranching operation history and investments in conservation projects. Learn about land management practices that include restoring streams, timed grazing of riparian areas, reestablishment of native willows and more. Bev will share about the practices on their ranches that have led to enhanced water quality, new wildlife habitat, improved aquatic habitat, along with their personal investment and the partnerships that help make it possible.</p>
2:00	<p>Economics of Multiple Rangeland Use and Conservation <i>Allen Torell, Ph.D., Professor of Agricultural Economics and Agricultural Business Department at New Mexico State University</i></p> <p>There is significant financial investment by individual ranchers, the public and private entities in conservation practices on rangelands. Torell will highlight some of the findings of the recently published research he has participated in on the social and economic assessment of rangeland conservation practices. There will be a focus on range condition correlation to rancher potential earnings and specie/resource goal conflicts when determining best rangeland management practices.</p>
2:30	<p>Requirements Resulting in Missed Opportunities <i>Daniel Mountjoy, Director of Restoration on Private Lands, Sustainable Conservation</i></p> <p>Improvements to private lands through the investment of public, private and individual ranchers dollars does not come without its hurdles of permitting. Today, some projects can include up to ten permits to implement a practice to voluntarily improve natural resources on a private ranch. These requirements discourage voluntary habitat enhancement and are resulting in missed on-the-ground conservation opportunities. This is nothing new to the California Rangeland Conservation Coalition. In fact, the foundation of the Coalition, the California Rangeland Resolution, states support for “enhancing habitat on rangelands while seeking to minimize regulations on private lands and streamline processes.” Daniel will provide a brief synopsis of the growing consensus that the permitting process needs to be improved before voluntary conservation projects can be implemented on a wide scale. Most importantly he will provide a vision to address regulatory and legislative</p>

	policies to improve permitting to facilitate more voluntary projects being implemented in a timely manner. Hear about the needed changes for permit coordination and the process undertaken to come to these recommendations.
3:00	Closing Remarks <i>Chuck Bonham, California Department of Fish and Game</i>
3:30	Reception with sweets and refreshments

Russell L. Rustici Rangeland Endowment, University of California, Davis
Kearney Foundation for Soil Science, University of California

