

Research Insights in Semiarid Ecosystems RISE

Recent research at the USDA-ARS Walnut Gulch Experimental
Watershed (WGEW) and the University of Arizona Santa Rita
Experimental Range (SRER)



RISE Program

University of Arizona, Tucson, Marley Building, Rm. 230
Saturday, 13 November 2004, 9AM to 4:30PM
Post-symposium BBQ, UA Mall, 4:30-6:30 PM

Purpose: The objectives of the symposium are to share recent results of scientific research at WGEW and SRER, to encourage future research activities at the WGEW and the SRER, and to promote the WGEW and the SRER as outdoor scientific laboratories.

**Research Insights in Semiarid Ecosystems (RISE) Symposium
13 November 2004**

Marley Building, Room 230

8:30-9:00	Registration	
9:00-9:10	Mitch McClaran Susan Moran	RISE Welcome
9:10-9:30	Steve Archer UA SNR	Woody plant proliferation in grasslands: new perspectives on an old problem
9:30-9:50	Judith Bronstein UA EEB	Linking plant and insect physiology in the <i>Datura wrightii</i> - <i>Manduca sexta</i> interaction
9:50-10:10	Dave Goodrich USDA ARS SWRC	Selected Research from the WGEW and looking to the Future
10:10-10:30	Poster introductions	<i>Poster teasers provided by poster authors</i>
10:30-11:10	Poster Session I (See List Below)	<i>Authors will be with their posters in the hall outside the conference room</i>
P1	Ross Bryant USDA ARS SWRC	Measuring surface roughness to parameterize radar backscatter models for retrieval of surface soil moisture
P2	Dawn Browning UA SNR	Land use history and soils: Impacts on woody cover assessments
P3	Jessie Cable UA EEB	Respiration in a semi-arid grassland in Southeastern Arizona: the role of precipitation pulses
P4	Bob Strain City of Sierra Vista	Upper San Pedro Partnership
P5	Adrian Vogl UA SNR	Prickly Pear (<i>Opuntia Engelmannii</i>) Carbon Pools in a Desert Grassland
P6	Theresa Mau-Crimmins UA SNR	Effects of removing Lehmann lovegrass (<i>Eragrostis lehmanniana</i>) from grasslands in southeastern Arizona
P7	C. Winston Wheeler Stanford University	Soil carbon following woody encroachment: variation within soils of different textures and along a climatic gradient at the SRER
P8	Hojin Kim UA SWES	Drought and Water Content Analysis of Semiarid Vegetation Communities with Remotely Sensed Data and Eddy-flux Tower Measurement
11:10-11:30	Dean Martens USDA ARS SWRC	Impacts of grazing and shrub management on hydrologic attributes in semi-arid rangelands
11:30-11:50	Alfredo Huete UA SWES	Seasonal and interannual patterns of carbon and moisture variability with combined AVIRIS and MODIS satellite observations
11:50-1:00	Lunch on your own	A food court is nearby in the UA Memorial Union
1:00-1:20	Travis Huxman UA EEB	Controls over carbon and water fluxes by vegetation, soils and climate
1:20-1:40	Leonard Lane USDA ARS (ret)	Proposed adaptive management experiments on small semiarid watersheds
1:40-2:00	Russ Scott USDA ARS SWRC	The differential response of transpiration and bare-soil evaporation to precipitation and their relation to carbon dioxide fluxes in a Chihuahuan Desert shrubland
2:00-2:20	Poster introductions	<i>Poster teasers provided by poster authors</i>
2:30-3:10	Poster Session II (See List Below)	<i>Authors will be with their posters in the hall outside the conference room</i>
P1	David Thoma USDA ARS SWRC	Comparison of two methods for extracting surface soil moisture from C-band radar imagery
P2	Heather Throop UA SNR	Spatial patterns of soil organic carbon relative to tree size and canopy distribution at the Santa Rita Experimental Range
P3	Enrico A. Yeppez UA SNR	Short-term dynamics of soil evaporation and transpiration following a moisture pulse in semiarid grassland: a chamber-based method using stable isotope tracers

P4	Eric Anson USDA ARS SWRC	Southwest Watershed Research Center Data Availability Project (DAP)
P5	Pierre Deviche ASU SLS	Supplementary information, not photoperiod, regulates Plasma luteinizing hormone in male Rufous-winged Sparrows, <i>Aimophila carpalis</i>
P6	Jorry Kaurivi UA SWES	Differentiating the phenology of <i>Prosopis velutina</i> from grassland with MODIS
P7	Chandra Holifield Collins USDA ARS SWRC	Estimating large scale daytime net carbon dioxide flux using instantaneous remote sensing measurements
P8		
3:10-3:30	Mark Nearing USDA ARS SWRC	Sediment tracer studies at Walnut Gulch Experimental Watershed
3:30-3:50	Mary Nichols USDA ARS SWRC	Sediment transport in low-order channels on the Walnut Gulch Experimental Watershed
3:50-4:10	Kris Havstad USDA ARS JER	Synthesis and implications of 90 years of science at the Jornada
4:10-4:30	Discussion	All speakers and poster authors will be in attendance
Bar-B-Que on the UA Mall 4:30-6:30		

RISE Organizing Committee:

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Acronyms:

ARS: Agricultural Research Service
ASU: Arizona State University
EEB: Ecology and Evolutionary Biology
JER: Jornada Experimental Range
SLS: School of Life Sciences
SNR: School of Natural Resources
SWES: Soil, Water and Environmental Science
SWRC: Southwest Watershed Research Center
UA: University of Arizona

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