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**A voluntary partnership with private landowners**


# California Conference Showcases Knowledge for Managing Rangelands

*- Submitted by CeCi Dale-Cesmat, California State Rangeland Management Specialist*

The California Rangeland Watershed Laboratory and the California Rangeland Conservation Coalition hosted the 2nd Rangeland Science Symposium and 8th annual California Rangeland Conservation Coalition Summit on January 24-25, 2013 at the University of California, Davis.

There were 391 attendees at the conference titled, "Today's Rangeland Management: Integrating Science, Practices, Partnerships and Policy." This was one of the state's largest gatherings focused on rangeland science, management, policy and production. The event brought together ranchers, researchers, land managers, agency representatives and conservationists to explore opportunities for collaboration and mutual learning.

"At the conference I was able to educate myself on the current status of grazing programs around the state. The variety of topics and different perspectives of speakers is what I liked best," states first time attendee Tammie Andrews, East Bay Regional Park District.

The presentations from the Rangeland Science Symposium are available at http://rangelandwatersheds.ucdavis.edu/main/2nd_rangeland_science_symposium.html. The presentations for the Summit and other conference highlights can be found at http://www.carangeland.org/calendarevents/2013summit.html.

*This event was sponsored by numerous organizations. The California Rangeland Conservation Coalition is a group of over 125 agricultural groups, non-profit organization, researchers and government agencies representing a broad cross-section of California's ranching and environmental communities. The California Rangeland Watershed Laboratory is located at the University of California, Davis in the Plant Science Department. The Laboratory focuses research and outreach on the diverse managed ecosystems that comprise California rangelands*


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# Great Resources On The Web

### ND Website Features Grazing Mentors

The North Dakota Grazing Lands Coalition has launched its new website at www.ndglc.com. The site features information on upcoming events, information about whole farm/ranch services and connections to their grazing mentors network.

### Alfalfa & Forage Blog

The University of California has introduced the Alfalfa & Forage News blog to provide information about topics of interest to alfalfa and forage growers and allied industry. The blog includes weekly posts with a variety of information at ucanr.edu/blogs/Alfalfa.

### Texas Forage Website Debuts

A new website aimed at providing timely management information and recommendations to hay producers and livestock managers has been launched by Texas A&M Agri-Life Extension forage specialists. Forage Fax (foragefax.tamu.edu) provides information on a wide variety of topics ranging from soil-sampling reminders, drought-management recommendations, new products, pasture issues, upcoming events, links to online resources and more.

Development of a photo gallery and 'weed of the month' posting to help producers learn to identify and manage common pasture weeds is also in the works.

An RSS feed allows subscribes to instantly receive posts as they're created. To sign up, go to Forage Fax and enter your email address.

### Noble Foundation Tapping Social Media

The well-respected Noble Foundation and their research activities can now be found via several social media outlets. The Noble Foundation Facebook page provides an in-depth look at the people, programs and research occurring at the organization's Ardmore, OK, campus. Informational links, videos and event information are posted regularly.

Noble's Twitter account offers real-time news about agricultural issues, as well as timely advice for ag producers in the Southern Great Plains. The Noble Foundation YouTube channel offers videos of recent agriculture educational programs. A series of "how-to" videos is also being added.

Noble also has Flickr and Pinterest pages giving a visual representation of Noble activities. And, Noble can be found on LinkedIn featuring employment opportunities.

## Save The Date: *14th Annual International Agroecology Shortcourse*

The International Agroecology Shortcourse will be held in Vermont from July 7-20, 2013. Participants from around the world will gather at UVM to learn about "Agroecological Approaches for Climate Change and Food Systems Resilience."

Farmers are constantly innovating in their daily practice, and much can be learned by identifying and analyzing existing agricultural management strategies that have the potential to adapt to and/or mitigate climate changes. By integrating ecological and social sciences with farmer's knowledge, agroecologists believe it is possible to both design and manage more sustainable agri-food systems and address global environmental change.

For more information, visit http://www.uvm.edu/~agroecol/shortcoursedescfinal_13.pdf

# Livestock Behavior Blog Features Forage Research

Beth Burritt at Utah State University has started a blog featuring information and research on animal behavior. The blog is at blog.usu.edu/behave. She is also asking anyone with behavior related research or on farm stories to submit them for the blog.

Here's an example of one of Burditt's recent posts titled *High Fiber in Mom's Diet Benefits Calves*:

Calves fed ammoniated wheat straw (AWS) with their mothers during the first 3 months of life perform better on AWS as adults. Does AWS in the diet of pregnant cows affect the intake and digestibility of AWS by their calves?

Cows were fed either a high-fiber diet (HF) of ammoniated wheat straw (AWS) and wheat middlings (WM) or a low-fiber diet (LF) of grass hay and barley. Both diets contained the same amount of net energy, nitrogen, minerals and vitamins, but they varied 10-fold in the solubility of carbohydrates.

Cows were fed either HF or LF during the last five months of pregnancy. At calving, all cow-calf pairs were fed high quality alfalfa-grass hay for 45 days then moved to pasture for five months. Calves were weaned at seven months and fed good quality alfalfa hay for three weeks.

For 40 days, all calves were fed WM supplement and AWS ad libitum. Calves from cows fed HF during pregnancy ate more AWS, and digested it more completely than calves from cows fed LF diets. There was also a tendency for calves fed AWS + WM to gain more weight if their mothers had eaten HF rather than LF.

Higher digestible intake of poor quality forage is likely important for pregnant cows that winter on rangelands. Cows eating high-fiber diets during pregnancy and after calving likely produce replacement heifers that will be more productive on poor-quality forages during winter the researchers concluded.

# RFD-TV Features "Out On The Land"

Out on the Land is a new, weekly half-hour television series that began airing Jan. 1, 2013 on RFD-TV. It focuses on agricultural land management, conservation and the private landowners who make it all work.

Each episode features a farm or ranch, its conservation challenges and successful-practices implemented by the land owners and managers. Host Larry Butler also offers land management tips pertinent to the episode's subject matter and often adds an entertaining and thought provoking story or cowboy poem.

Butler knows the subject matter, the people and the land. He worked more than 30 years with the USDA Natural Resources Conservation Service, retiring as the State Conservationist of Texas. Since then, he's been a private consultant, and frequent speaker and entertainer.

Each episode of Out On The Land premieres Tuesdays at 7 p.m. Eastern Time and reairs Wednesdays at 9 a.m. E.T. Dow AgroSciences is a presenting sponsor of Out On The Land. For more information visit www.outontheland.com or www.rfdtv.com.

# TREES: An important part of a conservation plan

We've all heard the adage "The best time to plant a tree was 20 years ago. The second best time is now." Particularly for livestock producers, trees planted as windbreaks or living barns can play a valuable role on livestock operations to diminish the effect of wind chill during adverse weather.

Robert Drown, a natural resource specialist working with conservation districts in northwestern South Dakota, points out that during prolonged exposure to cold, livestock require significantly more feed – some research suggests as much as 50% more; animals are less efficient at converting the energy from this feed for growth or milk production because they use it for body heat; and livestock are more susceptible to disease and other health risks.

Given today's higher production costs – particularly for feed, most producers are seeking strategies to reduce their livestock feed needs. That's where trees can be put to work.

Windbreaks or living barns can reduce wind velocity as much as 70% - while also helping lower animal stress, maintain feed efficiency and improve animal health. Drown reports that a study in Montana found that during severe winters, cattle in feedlots with shelterbelt protection maintained 10.6 more pounds than cattle in unprotected lots.

Windbreaks can be suitable at the edge of pastures, particularly near areas used for winter feeding or calving; near feedlots and near dairy and swine facilities. During the summer months, trees can reduce livestock stress by providing cooling shade and protection from hot winds as well.

Additional benefits from trees include helping reduce soil and water erosion; helping reduce dust and odors near concentrated livestock feeding areas; and providing habitat and cover for many species of wildlife, according to Drown.

## Assistance Available

While busy landowners may recognize the benefits trees offer, the time and work to plan and establish windbreaks and living barns can seem daunting. But help for this process is available through local conservation districts and the Natural Resources Conservation Service (NRCS).

"NRCS and conservation districts have staff who can provide landowners the technical assistance to determine how tree plantings may benefit their operation," explains Kent Baumberger, a district conservationist with NRCS in Miller, SD. No fee is charged for the technical assistance they provide.

Baumberger notes that the needs of each operation are unique and soil suitability, tree species, and design of the tree planting with consideration to the prevailing winds, drainage and access roads to feeding areas will all be evaluated in the planning process.

Baumberger adds that, if the landowner desires, NRCS can provide whole farm planning to address conservation needs and efficiency of the entire livestock operation. "With a conservation plan for the farm, landowners can develop a management plan for grazing, water developments, fencing, and managing the trees that are planted."

Additionally, with a conservation plan developed, landowners may qualify for Farm Bill programs such as the Environmental Quality Incentives Program (EQIP) that offer financial assistance for implementing conservation practices like establishing windbreaks. Additional programs with possible funding for tree planting, shelterbelt renovations or other conservation practices.

*For technical assistance on windbreak planning contact your local NRCS office.*

*By Kindra Gordon*

# Range Research: Forage Kochia Offers Promise

Pervasive cheatgrass has long posed a threat to ranchers and their communities in the Intermountain West. Edging out native perennials and taking over entire rangelands, the annual weed compromises forage value for livestock, destabilizes soil, increases risk of wildfire and diminishes wildlife habitat.

We've reached a point where a lot of times we can't directly reseed natives into the environment. The soils have been changed by years of dominance by cheatgrass, says Blair Waldron, a plant geneticist with the USDA Agricultural Research Service in Utah.

But there is new hope in forage kochia, a perennial shrub that Waldron and his colleagues have demonstrated is a stiff competitor against cheatgrass in semi-arid environments and provides excellent, protein-rich forage for cattle.

In four years of SARE-funded research, Waldron, Utah State University Beef Extension Specialist Dale ZoBell and others demonstrated forage kochia's adaptability to semi-arid western rangelands. They found pastures combining kochia and crested wheatgrass yielded six times more forage than comparison plots of crested wheatgrass alone, largely due to kochia's tolerance of drought.

In previous research, they demonstrated the profitability of this nutritious blend: Grazing cattle on kochia and crested wheatgrass from November through January cost participating ranchers 25% less than feeding alfalfa hay, and resulted in similar body condition scores.

By establishing forage kochia on rangeland damaged by invasive weeds, less land would be needed to manage more beef cattle. This allows other land to rest, Waldron says. Additionally, because kochia is perennial, it can act as a barrier against wildfires that feed off dead annual weeds.

Waldron has begun a more recently funded SARE project to further expand a rancher's toolbox, by exploring the potential of grass-legume pastures to meet nitrogen needs while promoting environmental stewardship. Waldron and his team will compare grass monocultures with low- and high-tannin grass-legume mixtures, anticipating that high-tannin legumes may reduce potential problems with excess nitrogen in a grazing system. They hope to develop recommendations for which species and grass-legume ratios optimize a ranch's economic and environmental sustainability.

*Source: www.sare.org*

To have your GLCI activities or upcoming events highlighted in this newsletter, contact Kindra Gordon at phone 605-722-7699 or kindras@gordonresources.com.

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Grassland Council
(800) 944-2342

American Sheep
Industry
(303) 771-3500

Dairy Industry
(517) 323-6575

National Association of
Conservation Districts
(202) 547-6233

National Cattlemen's
Beef Association
(202) 347-0228

National Farmers Union
(202) 554-1600

Society for Range
Management
(303) 986-3309

Soil and Water
Conservation Society
(515) 289-2331

**Visit the GLCI homepage at http://www.glci.org**