The purpose of the California Multi-Species Grazing/Browsing Academy is to teach, demonstrate and provide practical experience in using sheep and goats to reduce fuel loads, control invasive plants, utilize forage for grazing and browsing, and develop saleable product for a profit. The California Multi-Species Grazing/Browsing Academy will be a three day course emphasizing the practical application of research based grazing and browsing principles using sheep and goats.

Target audiences are ranchers, land managers and agency personnel who manage livestock on privately owned or public pasture and rangeland. Participants learn by actually applying the principles taught in range and pasture with live sheep and goats. Topics to be covered include: grazing/browsing principles, ecology, fencing, nutrition, supplementation, grazing/browsing planning, contract grazing/browsing, and much more.

Registration information is included in this newsletter and online at http://ucanr.edu/sites/Roger_Livestock/Multi-Species_Academy/

Sign up today for this exciting course.
The early May forage clipping at SFREC was 129% of normal. This is a blessing for the northern Sierra Foothills as areas farther south received lower amounts of rainfall. The late February - early March warm air temperatures warmed the soil and helped jumpstart growth. Despite all the forage, I would encourage you to assume drought conditions still exist. Rainfall in Placer County and at SFREC (similar for Penn Valley area) for October 1, 2015 - May 31, 2016 is around 85% of normal. Think about the importance of amount and timing of precipitation - 129% of normal forage production grown on 85% of normal precipitation!

### Sierra Foothill Research and Extension Center (SFREC)

**Forage Clipping was 129% of normal**

<table>
<thead>
<tr>
<th>Location</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFREC (inches)</td>
<td>0.73</td>
<td>2.97</td>
<td>4.29</td>
<td>7.92</td>
<td>1.32</td>
<td>6.22</td>
<td>0.52</td>
<td>0.53</td>
<td>24.5</td>
</tr>
<tr>
<td>SFREC Average (inches)</td>
<td>1.8</td>
<td>3.91</td>
<td>4.91</td>
<td>5.45</td>
<td>4.45</td>
<td>4.12</td>
<td>2.31</td>
<td>0.95</td>
<td>27.9</td>
</tr>
</tbody>
</table>

Irrigation delivery will be for the full season. Snowpack was about 87% of normal on April 1, 2016 - still below normal.

**La Nina**

At this time last year, there were a lot of articles and discussion about a big El Nino for California. The "big" did not quite materialize, but there was higher precipitation, more snowpack, and more forage in some places such as the northern Sierra Foothills. La Nina is the cool phase in the tropical Pacific and can generally lead to somewhat dry winters in California. The National Oceanic and Atmospheric Administration (NOAA) has issued a La Nina watch (https://www.climate.gov/enso). This means conditions are favorable for La Nina to emerge in the next six months. As of May 12th, the NOAA is saying that "La Nina is favored to develop during the Northern Hemisphere summer 2016, with a 75% chance of La Nina during the fall and winter 2016-17" (http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensost Epdisc.html).

**Implications**

It might be a good idea to conserve annual forage that is drying out now in order to have adequate supply in case fall turns dry. I would consider at least a 30 day drought reserve (through November - 60 days would be even better). Livestock water development would be another consideration. There is
potential for cost sharing on livestock water development projects through your local Natural Resources Conservation Service office.

This is the perfect time to assess your rangeland forage supply (carrying capacity) and develop a feed budget. A completed feed budget would show whether you have adequate forage supply for the number of animals you plan to carry on the land for the next 6-7 months (stocking rate). If you have less carrying capacity than planned (stocking rate), you have an early warning system and more flexibility in reducing numbers on the land.

Development of a grazing plan for the next 6-7 months would be advisable. Discussions on how to deal with a dry fall are more effective now when you have plenty of forage. Waiting until you have a month or two left of forage limits options and can create reactive decision making. I would be available to help you in developing a feed budget and/or grazing plan. You can contact me at rsingram@ucanr.edu or 530-889-7385.

UC Cooperative Extension Call for Positions Public Comments

ANR’s 2016 Call for CE Positions has entered the program area/unit review phase, May 5 – Aug. 1, 2016. During this time, the program teams, the ANR-affiliated colleges and professional school, and the regional groups of county/multi-county directors and Research and Extension Center directors will conduct reviews. For the proposals under their purview, the reviewers will 1) rate (high, medium or “this can wait”); 2) prioritize their highly rated positions (up to five) and 3) provide concise rationale.

The public comment period remains open until July 11, 2016.

Submitted CE position proposals can be viewed on the call web page http://ucanr.edu/2016callforpositions. To see the position description, click the proposal title link. In addition, the full call, including the updated position proposal template as well as the process flowchart timeline and criteria documents are posted as well.

Positions that may be of interest to provide public input (you can search by title or keywords):

- Ruminant Animal Nutrition and Behavior Specialist – SFREC
- Specialist in Sheep and Goat Herd Health and Production – Vet Med Extension
- Specialist in Animal Welfare for Communities in Production Systems – Vet Med Extension
- CE Specialist in Grazing Ruminant Nutrition – Department of Animal Science
- Area Livestock and Natural Resources Advisor – Butte and Sutter/Yuba Counties
- Area Livestock and Natural Resources Advisor – Central Sierra MCP
A New Name in Rangelands!
We are excited to release **UC Rangelands**, a new initiative launched by Leslie Roche, Ph.D. and Ken Tate, Ph.D. at UC Davis, in cooperation with other faculty and researchers at the University of California and UC Cooperative Extension.

The mission of UC Rangelands is to develop and advance science-based knowledge to diverse management and policy stakeholders to promote agricultural and environmental sustainability on California's grazing lands.

As part of this initiative, we are building a new one-stop-shop for rangeland research information and resources at [rangelands.ucdavis.edu](http://rangelands.ucdavis.edu/). At this new web-based information center, you will find updates on current projects by the UC Rangelands team, as well as highlights of future and past research and outreach activities.

Our Team is Growing!
In the past year a number of new faces have joined our team, and some familiar faces have taken on new roles!

- Leslie Roche, UCCE Specialist in Rangeland Management at UC Davis.
- Dan Macon, Assistant Specialist at UC Davis.
- Kelsey DeRose, Junior Specialist at UC Davis.
- Janyne Little, Junior Specialist with UCCE Lassen and Modoc Counties.
- Cari Koopmann Rivers, UCCE Livestock and Natural Resources advisor in Siskiyou County.

You can learn more about the UC Rangelands team and get links to all UCCE Livestock and Natural Resources advisors by visiting [rangelands.ucdavis.edu](http://rangelands.ucdavis.edu/).

NEW Project Profile - Drought Impacts on California Ranches
Drought is nothing new for ranchers; in fact, ranchers largely depend on dryland grazing and are among the first impacted by drought. Over 90% of California has endured severe to exceptional drought since 2012. Given the extent and severity of the current drought, the team at UC Rangelands is interviewing livestock producers to learn more about the real impacts of this drought on their operations.

The Drought Impacts on California Ranches Survey is a collaboration between UC Davis, UCCE, the California Cattlemen's Association, and the California Wool Growers Association. We are conducting
telephone surveys with ranchers to examine drought management strategies, economic and ecological impacts, and drought adaptation and recovery strategies resulting from one of our most severe droughts on record.

Project Outcomes
- Compile expertise of experienced ranchers on effective drought planning and strategies for recovery.
- Quantify real-world economic, social, and ecological impacts of drought to inform future drought planning and policies.
- Develop a California Ranch Drought Hub that integrates existing research and outreach resources with survey information.

Our goal is to interview 200 beef and sheep producers. Interested in participating or want more information? Please contact Dan Macon (dmacon@ucdavis.edu; (530) 889-7324), Leslie Roche (lmroche@ucdavis.edu; (530) 752-5583), or Tracy Schohr (tkschohr@ucdavis.edu; (530) 754-8766).

Upcoming Newsletter Topics
- Irrigated Pasture
- Monthly Blogs
- Post Fire Grazing
- Water Quality Partnership

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You are receiving this email as a past participant in Rustici Science Symposium or UC Davis Rangeland Watershed Laboratory event!

Our mailing address is:
Rangeland Watershed Laboratory
Plant Sciences, Mail Stop 1
One Shield Avenue
Davis, CA 95616-8780

Other Resources

California Board of Equalization Tax Guide for the Agricultural Industry - I came across this while looking for information on sales tax for farms and ranches. It is an excellent in-depth guide that will help you understand when you would pay the full sales tax or partial or no sales tax. http://www.boe.ca.gov/pdf/pub66.pdf

Trace Minerals for Livestock Website - The UC Davis Department of Animal Science recently updated their Trace Minerals for Beef Cattle website. It includes links for a Trace Minerals for California Beef cattle publication and a project website. The project website allows you to click on a county and see any specific mineral data for that area. http://animalscience.ucdavis.edu/extension/trace-minerals-for-california-beef-cattle/index.html
Managing Insect Pests of Animals

Alec Gerry is a Professor and Extension Specialist in Veterinary Entomology at UC-Riverside. He recently sent out an email about a database. In the email he said, “Interested in managing insect pests of animals?” While management should focus first on breaking the life cycle of insect pests, in some cases management options may include use of insecticides.

The VetPestX searchable database of pesticides registered by state for use to manage ectoparasites of animals has been expanded over the last few months to now include records for 22 US states. You can search the database by navigating your web browser to this site: http://veterinaryentomology.ucr.edu/vet_pesticides.html. The site contains videos and other educational resources.

Placer County USDA Inspected Slaughter and Processing Update
Roger Ingram, County Director and Farm Advisor Placer and Nevada Counties

A producer steering committee from Placer, Nevada, and Yuba Counties applied for a Value-Added Producer grant (VAPG) in July 2015. The grant was submitted to develop a business plan for building a USDA inspected slaughter and processing facility in Placer County. The steering committee was notified they were selected to receive the grant in September 2015. They then had to form a corporation in order to be able to submit expenses for reimbursement by the grant. The Sierra Foothills Meat Company, Inc. was formed in November 2015. The board of directors is made up of cattle, sheep, goat, and pig producers from Placer, Nevada, and Yuba Counties. There are a total of 8 board of directors. Their vision is: In 5 years, Sierra Foothills Meat Company, Inc. will be a thriving and profitable state of the art business that is clean and attractive; gives quality customer service; is environmentally responsible; provides career opportunities; and enhances the regional economy as well as the local community.

Dakota Global was chosen by the board to develop the business plan. Dakota Global is based in Fargo, ND has extensive experience working with USDA inspected slaughter and processing plants both large and small. Alternative energy and waste stream production will be developed by Biogas Energy. They will evaluate the feasibility of using anaerobic digestion and woody biomass gasification for energy generation, wastewater treatment, and biofuels production.

Dakota Global is headed by Travis and Rob Maddock. They came to Auburn, CA April 21-23 to meet with the Sierra Foothills Meat Company board and discuss the business plan. While here, they were able to visit three of the board member’s livestock operations, Briar Patch and SPD retail stores in Grass Valley, and Three Forks Bakery and Brewery in Nevada City. The two retail stores and restaurant feature locally grown meat from the area.

Discussions with the board members touched on a diverse set of topics. Dakota Global indicated three main factors for a successful facility: competent people, producing excellent product, and efficient processes. Hiring an effective manager is key to the success of the facility. The need to provide services with sufficient margin was stressed – cost + 30% was suggested as ideal. The economic analysis will provide the answers on generating sufficient margin at competitive slaughter and processing pricing.

Two other key points, the need for sufficient working capital and cash to loan ratio. Working capital is critical for contingency, paying bills, paying salary, and training was discussed. A target of between $200,000 and $400,000 in working capital was suggested. The cash to loan ratio has significant impact on cash flow and the time needed for the facility to reach profitability. Dakota Global said that a 67% cash and 33% loan ratio would be ideal. This would ease cash flow pressures that would come up during the slower winter and early spring time period when less animals would be coming to the facility.

Facility size, cooler space, and services provided (sausage, pet food, organ meats) were also discussed. The development of the business plan and alternative energy/waste stream reduction are moving forward and will lead to discoveries of opportunities and challenges. The board will take this information and develop strategies for overcoming challenges and expanding opportunities. The board will then make the decision on moving forward with business plan implementation by late fall-early winter.
Grazing Planning Resources

Planning for and recording grazing are critical planning and monitoring tools. They help you plan rest and graze periods, assess if there are things such as lack of livestock water or poisonous plants that might make a paddock unavailable for a period of time, facilitate where you want your herd to be in critical times of the year such as breeding and birthing, and track the number of stock days in a paddock or the whole ranch.

Here are some grazing planning resources you may find helpful:

- **Grazing Charts**
  - Holistic Management International - They have paper charts and a grazing planning software tool. I have been using the grazing planning software tool over the last 8 months and finding it very useful, especially for recording grazing. Paper grazing planning - [http://holisticmanagement.org/store/planning-tools/](http://holisticmanagement.org/store/planning-tools/) Grazing planning software tool - [http://holisticmanagement.org/store/multimedia/](http://holisticmanagement.org/store/multimedia/)
  - Pasture Map - This is an online grazing planning and recording tool. I recently purchased a subscription. They continue to add new features: [http://pasturemap.com](http://pasturemap.com)
  - Grazekeeper - This is another online grazing planning and recording tool. [https://www.grazekeeper.com/index.php](https://www.grazekeeper.com/index.php)

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Central Valley Regional Water Control Board
Nitrogen Management Plan - Irrigated Pasture

There was a recent determination that producers who grow irrigated pasture and do not apply nitrogen will not have to prepare a nitrogen management plan. If you do apply nitrogen, you would need to prepare a nitrogen management plan. If you need help completing, please contact me at rsingram@ucanr.edu or 530-889-7385. Do you know about the Irrigated Lands Regulatory Program? If you are a commercial producer and irrigate, you must be a member of the Placer-Nevada-South Sutter-North Sacramento (PNSSNS) subwatershed group. For more information, go to their website at [http://www.cleanwaters.info](http://www.cleanwaters.info) or call 916-645-1774.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
ORDER NO. R5-2016-0015
February 2016

14. Nitrogen Management Plans and Nitrogen Management Plan Summary Reports are not required for Irrigated pasture to which no external nitrogen is applied. Direct nutrient returns in excretions of grazing livestock are a portion of the total nutrient supply in the forage eaten by animals, and are not considered a fertilizer application to irrigated pasture.
UPCOMING EVENTS

Contact Roger Ingram at (530) 889-7385 or rsingram@ucanr.edu to register or if you have questions. Check website for updated information at ceplacer.ucdavis.edu

**Pastured Pig Workshop**
June 7, 2016
6:00—8:00 PM
Dinner Bell Farm, Chicago Park, CA

This workshop is being finalized and will provide you with demonstration and hands-on experience with raising pigs on pasture for both breeding and meat. You will learn about breeds, electric fence, nutrition, husbandry tips, marketing and more. A flyer is included with this newsletter.

**California Multi-Species Academy**
September 16-18, 2016
UC Cooperative Extension Office
11477 E Ave, Auburn, CA
Cost: $170

The Academy features hands-on experience with grazing/browsing sheep and goats. Topics covered include: grazing/browsing principles, ecology, targeted grazing, nutrition, reproduction, guard dogs, and grazing planning. A flyer is included with this newsletter.

**Smutgrass Management in Irrigated Pasture**
July 16, 2016
9:00—11:00 AM
Sinclair Family Farms, Newcastle, CA

A flyer is attached to this newsletter.

**Pasture Walk**
August 2016
6:00 - 8:00 PM
TBD

**Getting Started in Beef Cattle**
September 24, 2016
9:00 AM - Noon
Auburn, CA

More detailed information on the workshop will be posted in June.

Roger Ingram
County Director, Placer and Nevada Counties
AGENDA

- Welcome, Farm History
- Breeds suitable to be raised on pasture
- Breeding
- Farrowing
- Processing piglets
- Weaning
- Nutrition
- Weaning to Finishing on Pasture
- Processing into meat
- Selling meat options

JUNE 7, 2016
PASTURED PIG FIELD DAY

DINNER BELL FARM
CHICAGO PARK, CA
6:00 to 8:00 PM
Cost: $5.00 per farm

Register at http://ucanr.edu/survey/survey.cfm?surveynumber=18035
Smutgrass Management in Irrigated Pasture

WHEN:  Saturday, July 16, 2016
TIME:   9:00 AM to 11:00 AM
WHERE:  Sinclair Family Farms
        641 Lozanos Road, Newcastle, CA
COST:   FREE
REGISTER ON-LINE AT:  http://ucanr.edu/survey/survey.cfm?surveynumber=18134

Agenda

1. Welcome and Introductions
2. Biology of Smutgrass
3. Control Options
   A. Chemical
   B. Grazing Strategies
4. How to treat smutgrass with weedwiper
5. Renting the weedwiper

Should you need additional information contact Roger Ingram at rsingram@ucanr.edu or 530-889-7385

SPONSORED BY:

USDA  UCCE

TAHOE CATTLEMEN’S ASSOCIATION
2016 California Multi-Species Grazing/Browsing Academy

WHEN:  September 16 - 18, 2016
WHERE:  UCCE Placer
11477 E Avenue
Auburn, CA  95603
COST:  $170.00
(includes meals and course materials)

Registration is required:
NO walk-in registrations due to set-up
needed for hands-on activities
NO REFUNDS - Your payment guarantees your space

This Academy is a unique and exciting program emphasizing the practical
application of controlled grazing/browsing principles to improve the
environment and increase ranch profit. This challenging course consists of a
minimum of lecture and a maximum of hands-on experience. Participants
learn by actually applying the principles taught in the range and pasture with
live animals.

You will learn the following at the Academy: Grazing principles, range and
brush ecology, nutrition, guard dogs, reproduction, health, grazing planning, and monitoring.

Speakers
• Roger Ingram, Livestock and Natural Resources Advisor Placer & Nevada Counties
• An Peischel, Small Ruminant Specialist, Tennessee State University

Who Should Attend
Ranchers, land managers and agency personnel who manage livestock on privately owned or public pasture and
rangeland.

How to Register
Register on line at:  http://ucanr.edu/survey/survey.cfm?surveynumber=17515
OR
Print out and mail-in your payment and application:  http://ucanr.edu/sites/Roger_Livestock/files/235307.pdf
Should you have any additional questions contact Roger Ingram at (530) 889-7385 or email at rsingram@ucdavis.edu

Sponsored by:

WEB SITE:  ceplacernevada.ucdavis.edu

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Action Contact, University of California, Davis, Agriculture and Natural Resources, One Shields Avenue, Davis, CA 95616, (530) 752-0495.
2016 California Multi-Species Grazing / Browsing Academy Registration Form

Date:  September 16—18, 2016 - Registration closes September 4, 2016

Cost:  $170.00  (includes meals, and course materials)
       NO WALK-IN REGISTRATIONS DUE TO SET-UP NEEDED FOR HANDS-ON ACTIVITIES

Register:  Complete this form, mail with your check payable to University of California-Regents, to:
           Roger Ingram
           California Multi-Species Grazing Academy
           11477 E Ave.
           Auburn, CA  95603
           OR, visit our website: http://ceplacer.ucdavis.edu and follow the links.

First Name  ____________________________________________  Last Name  ________________________________
Address:  ________________________________
City  ________________________________  State/Zip  ________________________________
Email:  ________________________________  Phone Number:  ________________________________

Location:  Auburn, CA

What types of animals do you graze or manage?  ________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
How many head:  ____________________________  On how many acres:  ____________________________

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