FOOTHILL RANCHER

...Practical Information for Foothill Livestock Producers

CALIFORNIA SOIL HEALTH and GRAZING ACADEMY
April 29-30, 2016
Sierra Foothill Research and Extension Center,
Browns Valley, CA

Cost: $170 (incudes meals and course materials; limited
dormitory lodging; camping available)
No walk-in registrations

2016 Grazing Academy to Highlight Soil Health

This year’s California Grazing Academy will again feature participants
working in teams and having a herd of cattle to manage. We will cover
principles of controlled grazing, pasture and range ecology, soil
health, working with temporary electric fencing, cell design, range
nutrition and supplementation, feed budgeting, grazing planning, and
monitoring.

There will be added presentations and activities related to soil
health. You will leave the academy with the ability to determine soil
texture, moisture, infiltration, aggregates, and soil microbes. These
activities will help increase your understanding and awareness on the
role grazing management plays in keeping roots healthy and their
connection to soil health.

Those estimates of carrying capacity will be paired with feed
budgeting to determine how many days of grazing you have with your
current stocking rate. We can then make quick adjustments to assess
the impact of different culling levels on stretching remaining forage
resources without having to rely on feeding hay.

Grazing planning will enable you to see how to map out the grazing on
your property or those that you lease. Mapping out the grazing
determines if we are meeting rest period targets and see how we can
Plan animal moves to fit best with the production year. For example, what paddocks do we want to graze when animals are having babies or being bred. The 2016 California Grazing Academy can help you get started on developing your drought plan for your ranch. Sign up today.

The California Grazing Academy is a unique and exciting program emphasizing practical application of controlled grazing 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.

After completing the Academy, course participants will be able to:
1. Assess the condition of the four basic ecological processes that determine ranch productivity.
3. Apply principles of time and stock density to improve pasture productivity and stock performance.
4. Estimate carrying capacity.
5. Apply principles of animal behavior to reduce stress.
6. Determine the supplementation needs of grazing animals.
7. Design a layout to efficiently use resources and apply controlled grazing principles.
8. Understand the basics of developing a grazing plan.
9. Immediately improve grazing management on your own ranch.
10. Managing through drought.

FIRE EVACUATION PLAN
BY ROGER INGRAM
UCCE PLACER/NEVADA COUNTIES
FARM ADVISOR

With the fires raging across the state, we are reminded once again of the risk wildfire poses to all of our farms and ranches. It is a good time to revisit (or create) a farm and ranch safety plan at this time and update it with any missing information. If you have livestock, you will need to create an emergency plan for your animals.

There are five main components to your wildfire plan:
- Reducing fire risk
- Escape Routes
- Leaving Animals on the Property
- Backup
- Other considerations

Reducing fire risk
One first step would be to set up a meeting with Cal-Fire to review how to make your house, other structures, propane tank, and property more fire safe. You should consider creating an area of defensible space around your corrals/barns/small pastures adjacent to structures as well as your house. Disking around the perimeter at least ten feet would be a preferred option as well.

Water Supply
Determine if you have adequate water supply to fight the fire and wet down buildings. Is your source of water a well, irrigation ditch and/or pond. Do you have a ability to pump without power? This would mean a gas or diesel generator to ensure that you would be able to pump water. This would also mean adequate fuel to run the generator. You should still consider a backup generator even if you have gravity flow water because you may not have power for an extended period of time.
Escape Route
Do you have two separate ways in and out of the property? If not, is there a way to create an alternative route? If you only have one way in and out, what would you do if there was a fire approaching? You should contact friends or family that live out of your immediate area that may be able to temporarily house livestock. Fairgrounds and other facilities will also be available to house livestock during a wildfire evacuation. It is a great idea to contact local fairgrounds and facilities to learn more about temporarily housing for livestock. Please note that you should contact friends, family, fairgrounds, and other potential facilities in the near future to discuss the situation.

The process is more than hauling animals and dropping them off. Where do you unload animals? Where will they be housed? What other feed, water troughs, and equipment do you need to bring? Is there someone who could temporarily feed and water while you were gone for a day or two trying to fight the fire on your property?

Leaving Animals on the Property
Many of us simply have too many animals and not enough transportation capacity to evacuate all of our animals from the path of an impending wildfire. Leaving animals out in a pasture, or “sheltering in place,” is a good option if the conditions allow animals to stay safe during a fire. According to the Humane Society of the United States, large animals may be able to shelter in place during a wildfire if a pasture area meets the following criteria:

- Over 1 acre in size,
- Has no overhead powerlines or poles,
- Has no barbed wire fencing (woven wire fencing is best).
- For high-wind scenarios, the pasture area must also be free of debris and easily uprooted trees.

You will also need to leave enough food and water for your animals to survive for a few days. You will not be able to return to your property to care for your animals until road closures and evacuation orders are lifted. Do not rely on automatic watering systems as power outages are likely in the event of a fire.

Many large animals are injured and killed attempting to escape from the path of a wildfire. Take down any portable fences and give your animals the largest space possible to move around in.

Backup
Do you have a designated backup in case you were away when the fire started? This person would need familiarity with all of the above and live close by. Related to this is when to make the call to your back up person or hauling animals off the property. You must think quickly as conditions on a fire can change in less than hour. You should develop a decision making process and a designated critical point that would mean implementing the fire plan.

Other Considerations
Fires can happen suddenly and will require rapid action. Keeping emotions in check will be critical to reacting effectively and staying calm. Normally calm animals will be more excited by the fire and smoke and will be more difficult to handle. This will require even more patience to be sure they can be loaded in a trailer or herded to a safer location on the ranch as quickly as possible.

Situational awareness is a good concept to consider. This can be accomplished by developing a network of communication with other ranchers and landowners. Text messaging, email, or a phone call can be an effective, quick way to inform others if you are seeing smoke or low flying airplanes as a first alert that a fire is in the area.
This is a good reference from New York that contains helpful checklists:

Additional information on wildfire evacuations are included here:
http://www.calfire.ca.gov/communications/downloads/fact_sheets/Animalevacuation.pdf
http://www.ext.colostate.edu/pubs/livestk/01815.html

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Save the date!!!
UC Davis Goat Day
January 23, 2016
UC Davis Conference Center

Designing a Healthy Herd

- **Featured Speaker:** Erika McKenzie-Chapter, Head Cheesemaker, Dairy & Herd Manager, Pennyroyal Farm; Owner, Chevre Noir Dairy Goats
- Research & Regulatory Updates
- Biosecurity & Zoonosis
- Herd Health for all Ages
- Afternoon rotations
- DHIA West Scale Certification

http://animalscience.ucdavis.edu/events/goatday/default.htm
SB 27 (Hill) – California’s 2015 Antibiotic Legislation

Antibiotic resistance is an issue that threatens human health and animal health. Working with Senator Hill on SB 27, California Cattlemen’s Association helped lead the way in securing landmark legislation that will make California a leader in combating antibiotic resistance and ensuring judicious use of antibiotics while protecting ranchers’ ability to provide timely care for their livestock. SB 27 ensures ranchers can continue to use antibiotics effectively to treat, control and prevent disease.

Why was SB 27 introduced?

SB 27 follows the veto of SB 835 in 2014 also by Senator Hill which sought to prohibit the use of medically important antibiotics for feed efficiency or growth promotion. In his veto message, Governor Brown said the bill did not go far enough and directed the legislature to bring another comprehensive bill to his desk in 2015.

What does SB 27 do?

Beginning Jan. 1, 2018, SB 27 requires injectable and other medically important antibiotics not delivered through feed or water to be purchased with a prescription issued by a veterinarian.

- Independent of SB 27, all medically important antibiotics delivered through feed must be administered using a veterinary feed directive per federal regulations largely supported by the industry and pharmaceutical companies.
- Many antibiotics already require a veterinarian prescription (i.e. Nuflor®), but for those that currently do not but will beginning Jan. 1, 2018 (i.e. LA200®) can still be purchased at retail facilities with a veterinarian prescription.
- SB 27 requires the Department of Food and Agriculture to ensure that livestock producers in rural areas continue to have timely access to antibiotics.

SB 27 requires the Department of Food and Agriculture to develop voluntary stewardship guidelines and best management practices with veterinarians and livestock producers.

- Guidelines will be developed in coordination with the Department of Public Health, the Veterinary Medical Board and experts at the University of California Veterinary Medical School.

SB 27 will voluntarily monitor antibiotic use and most importantly, monitor patterns in antibiotic resistance.

- All information that is collected will be held confidential per the statutory provisions of the bill, including from FOIA or PRA requests.
- The data gathered in California will be integrated with national monitoring efforts.

SB 27 codifies in statute that antibiotics can be used for disease prevention where necessary.

- Specifically the bill states, “A medically important antimicrobial drug may also be used when, in the professional judgment of a licensed veterinarian, it is needed for prophylaxis to address an elevated risk of contraction of a particular disease or infection.”

What SB 27 DOES NOT do

SB 27 does not impact the use of non-medically important antibiotics such as ionophores (i.e. Rumensin®),

- Vaccines are not considered antibiotics and thus will still be available for purchase over-the-counter without a prescription.

SB 27 does not alter how antibiotics are administered under the California Veterinary Medical Practice Act or change the nature of the veterinarian-client patient relationship.

- So long as a relationship exists, veterinarians can prescribe antibiotics to a rancher under one prescription for up to a sixth month period.
- Producers must consult with their veterinarian at least once annually, however SB 27 does not require a veterinarian to administer the antibiotic or issue an individual prescription for each time an antibiotic is needed to treat, control or prevent disease.

Prepared by: CALIFORNIA CATTLEMAN’S ASSOCIATION
ECOLOGY UPDATE

Weather
Still dismal. Despite all the hype about El Nino, rain has not arrived at the amounts needed to pull out of the drought. Any precipitation is welcome and colder storms means there is snow in the mountains. Rainfall totals over a 12 month rolling period are around 60% of normal at the Sierra Foothill Research and Extension Center (SFREC) and Auburn weather stations.

Here are rainfall totals for the last four years running from October 1 - September 30.

<table>
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<tr>
<th>SFREC</th>
<th>Year</th>
<th>Precipitation (in)</th>
<th>Normal Precipitation</th>
<th>% of Normal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oct 2011 – Sept 2012</td>
<td>22.23</td>
<td>28.85</td>
<td>77.1</td>
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<tr>
<td></td>
<td>Oct 2014 – Sept 2015</td>
<td>17.51</td>
<td>28.85</td>
<td>60.7</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Auburn</th>
<th>Year</th>
<th>Precipitation (in)</th>
<th>Normal Precipitation</th>
<th>% of Normal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oct 2011 – Sept 2012</td>
<td>23.88</td>
<td>34.30</td>
<td>69.6</td>
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<td>34.30</td>
<td>60.9</td>
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<tr>
<td></td>
<td>Oct 2014 – Sept 2015</td>
<td>22.25</td>
<td>34.30</td>
<td>64.9</td>
</tr>
</tbody>
</table>

Here is a reminder about the concept of having a critical date:

Critical Date
This is the date by which, if it either has not rained or there has not been significant growth, you know that you are in a drought and will be short of feed. This is the trigger date by which you will implement your destocking plan.

In a typical California foothill rainfall year, March 1 might serve as a red flag to monitor forage growth and rainfall and April 1 could be the critical date. Most people would wait until sometime in May to assess feed conditions. The year 2014 was different. The pro-active critical date was January 1 and February 1 was definitely a time to implement the destocking plan.

There is still time for rains to come. The table above should put up a yellow flag about all the El Nino discussion. Believe it when you see it!
Soil
The number one consideration for soil right now is to have cover to minimize erosion. This can either be a rooted annual or perennial plant or litter. Adequate cover will provide more consistent soil moisture and temperature for good germination. Cover will reduce the velocity with which raindrops hit the soil and encourage moisture to soak in vs. running off. Litter that decomposes will add organic matter to the soil, which serves as a source of food for soil microbes.

Forage
According to UC Publication 8018, *Annual Range Forage Production*, break of season follows the first fall rains that exceed 0.5 to 1 inch during a 1-week period (Bentley and Talbot 1951). Break of season in Auburn occurred during the first week of November with 1.07 inches of rain on November 1st and 2nd. Break of season at SFREC occurred in the same time frame with 0.97 inches of rain on November 1st and 2nd. Soil temperatures were conducive to germination when break of season occurred as they were over 60 degrees. Soil temperatures have dropped to around 55 degrees as of November 20th. The publication is available for download at this link: [http://ucce.ucdavis.edu/files/repository/114175.pdf](http://ucce.ucdavis.edu/files/repository/114175.pdf)

UC Publication 8018 goes on to note: The new fall growing season (break of season) begins when rains start the germination of stored seed (Table 1). Young annual plants then grow rapidly if temperatures are warm (60° to 80°F [15.6° to 26.7°C]) but more slowly if cooler temperatures pre-vail (40° to 50°F [4.4° to 10°C]) (George 1988b). There is little growth during winter when temperatures are low (40°F [4.4°C] or less). Rapid spring growth commences with warming conditions in late winter or early spring. Rapid growth continues for a short time (60-75 days) until soil moisture is exhausted. Peak standing crop occurs at the point when soil moisture limits growth or when plants are mature.

Based on this research, we have entered into a period of slow forage growth. Slow growth means longer rest periods. If we key to perennial plants on range this would translate to 90-120 days of rest. Coming back to soon will result in overgrazing – grazing a plant before it has recovered from the previous grazing.

There is information included with this newsletter on the 2016 California Grazing Academy if you would like some hands-on training with grazing management.

References:

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

Grazing Management for Soil Health
Nevada County Food and Farm Conference
January 8-10, 2016
Grass Valley, CA
http://foodandfarmconference.com

Soils form the foundation for growing forage and raising livestock. This workshop will help you gain knowledge about life in the soil and how grazing management can enhance the productivity of your soil. During the workshop, you will learn about physical soil properties: texture, aggregates, stability, and estimating moisture. You will learn about the importance and role of soil microbes in the soil. You will learn about the Cornell Soil Health soil test and see results from the Nevada County area. Grazing principles that promote soil health, root growth, and cover will be highlighted.

5th Annual Beef Improvement Symposium
January 9, 2016
UC Davis Gladys Valley Hall

Information on this event is included in this newsletter. David Pratt of Ranch Management Consultants will speak on Ranching as a Business and the Three Secrets for Increasing Profit. There are also many other interesting speakers that day.

UC Davis Goat Day
January 23, 2016
UC Davis Conference Center.

Information on this event is included in this newsletter.

Shepherding School
Introduction to Sheep Production
Mid January 2016
UCCE Extension Office
11477 E Ave, Auburn, CA 95603
6:30-8:30 PM

This evening classroom session will provide information on the basic economics of small-scale commercial sheep production, on marketing, and on creating a basic sheep management calendar.

Shepherding School
Introduction to Sheep Production Field Day
Mid January 2016
UCCE Extension Office
11477 E Ave, Auburn, CA 95603
8:00 AM - Noon

This field day will provide students with hands-on learning opportunities regarding administering vaccinations and medications, assessing foot health and trimming feet, evaluating external and internal parasite loads and administering de-worming products, and developing individual animal identification systems. Participants should wear work clothes appropriate to working outside with livestock in winter weather!

California Soil Health Grazing Academy
April 29-30, 2016
Sierra Foothill Research and Extension Center

This two day school features hands-on experience with electric fencing, cell design, grazing cattle, soils, ecology, nutrition and supplementation, grazing and drought planning, and monitoring.

Roger Ingram
County Director, Placer and Nevada Counties
Livestock & Natural Resources Advisor
January 9, 2016

- 
Gladys Valley Hall

UC Davis School of Veterinary

DRIVING DIRECTIONS

FROM SACRAMENTO

Take I-80 West toward San Francisco. Stay on I-80 West toward San Francisco for approximately 15 miles. Take Highway 113 North Exit (to Woodland). Take the first exit (Hutchison Drive) and bear right (east) on Hutchison. Take the second right onto LaRue Road (4-way light). Drive on LaRue until you reach a curve in the road. At the curve, turn right on Garrod Drive. Follow Garrod Drive around to the stop sign. At the stop sign, go straight into Parking Lot #50. There is also parking available next to the Center for Companion Animal Health in Parking Lot #55.

Registration

Name (Last, First): ____________________________
Ranch: ________________________________
Address: ________________________________
City: __________________ State: ____________
Zip: __________________ Phone: ____________
Email: ________________________________

Check if interested:
___ Disaster Preparedness:
Large Animal Restraints

Payment Information:
___ Check Enclosed (Payable to FARM Club)
___ Visa ___ MC ___ Amex

Name of card: ____________________________
Credit Card Number: ______________________
Expiration Date: ___________ Security Code: _____
Signature: ________________________________

Registration Fee:
$40 per person before January 1, 2016
$50 per person after January 1, 2016

Mail/ email payment and registration form to:
FARM Club
c/o Kristi Bower
551 Scripps Drive
Davis, Ca 95616
kmbowers@ucdavis.edu

Day-of registration is available, however you must RSVP via email (above)
FARM Club at UC Davis Presents:
5th ANNUAL BEEF IMPROVEMENT SYMPOSIUM
January 9, 2016 • Gladys Valley Hall • UC Davis School of Veterinary Medicine

7:30am Registration, Coffee & Doughnuts
8:00am DEAN’S WELCOME
DEAN LAIRMORE, UC DAVIS, SCHOOL OF VETERINARY MEDICINE
8:10am WHEN DISASTER STRIKES: WHAT RANCHERS CAN DO BEFORE, DURING, AND AFTER THE CRISIS
DR. BENNIE OSBURN AND DR. MICHAEL PAYNE, WESTERN INSTITUTE FOR FOOD SAFETY AND SECURITY (WIFSS)
9:00am RANCHING AS A BUSINESS
DAVE PRATT, OWNER OF RANCH MANAGEMENT CONSULTANTS: RANCHING FOR PROFIT
9:10am The Beef Improvement Symposium will be running concurrently with the Livestock Symposium for veterinarians. FARM club will also be holding a raffle fundraiser! (Tickets sold at event)
12:00pm LUNCH
12:10pm AFTERNOON SCHEDULE
1:00pm THREE SECRETS FOR INCREASING PROFIT
DAVE PRATT, OWNER OF RANCH MANAGEMENT CONSULTANTS: RANCHING FOR PROFIT
2:00pm WORKING WITH YOUR VETERINARIAN TO IMPROVE CATTLE HEALTH
DR. JESSICA LIGHT, DAIRY TECHNICAL SERVICES, ZOETIS
3:00pm REFRESHMENT BREAK
3:10pm DIAGNOSTIC INVESTIGATIONS OF HERD MORTALITIES
DR. LESLIE WOODS, CALIFORNIA ANIMAL HEALTH AND FOOD SAFETY LABORATORY (CAHFS)
4:10pm BULL PREVENTATIVE HEALTH: BSEs AND TRICHOMONIASIS
DR. BRET MCNABB, LIVESTOCK REPRODUCTION AND HERD HEALTH SERVICE, UC DAVIS

** 3-4 pm Alternate Offerings: “Disaster preparedness: Large Animal Restraint” wet lab led by Dr. Eric Davis

The Beef Improvement Symposium will be running concurrently with the Livestock Symposium for veterinarians. FARM club will also be holding a raffle fundraiser! (Tickets sold at event)

FEATURED SPEAKERS

Chris Kerston
Allan Savory Institute: Director of Events and Public Outreach

Chris Kerston has been grazing cattle for over a decade. With a longstanding passion for alternative agricultural models, Chris has dedicated much of his life to helping connect ranchers with consumers in ways that create real value for both parties.

For 6 years Chris co-managed a 2,000 acre diversified farm based on holistic grazing and permaculture in the Sacramento Valley. The farm is comprised of old growth olive orchards, heirloom stonefruits and citrus groves, and also raises grass-fed cattle, sheep, goats, and pasture-raised chickens for both meat and eggs. Through creative positioning, the farm quickly attracted national notoriety and the attention from public figures such as Joel Salatin and Michael Pollan.

Chris has become a recognized public speaker championing for stronger connections between grower and eater and providing training to help build those connections. He has been on the forefront of the collaborative process with state and federal regulators, advocating for the recognition of alternative agricultural models as well as the consumers’ right to access healthy local foods. Chris is also very enthusiastic about developing opportunities for young ranchers. Fostering creative solutions to removing barriers of available land and capital will ultimately help cultivate the next generation of holistic land stewards.

Dave Pratt:
Owner of Ranch Management Consultants: Ranching for Profit

Dave bought the Ranching Management Consultants in 2001. Dave, who had a history of innovative research and teaching in his 15 years in the University of California Cooperative Extension Service, had been teaching Ranching for Profit Schools for Stan since 1992. Today, Dave and Kathy run RMC from their office in Fairfield, California. They have maintained the same high standards of teaching and continued the mission to empower clients to achieve their goals.