

## Don't forget about zinc in cattle mineral supplementation

Josh Davy – Livestock, range, pasture advisor

Zinc is included in almost all beef cattle mineral supplements. With the assistance of other advisors around California I have completed a recent survey evaluating the mineral status of cattle ranging from Sisikiyou to Los Angeles Counties. We collected serum from approximately 560 cattle in California. With how commonly included zinc is in almost all mineral supplement programs, it was surprising to find that 45% of the cattle sampled statewide were deficient in zinc. In the North state, deficiency was closer to 30%.

Zinc is important for follicle development, thus affecting reproduction. Deficiency can also negatively impact immune response, growth, wound recovery, and hoof health, and more.

Since nearly all areas of the state seem to have at least some prevalence of deficiency, checking cattle by either serum or liver testing is worth the investment. If deficiency is determined there is likely four factors to check

1. Is the zinc content high enough? In some cases it may need to be 5,000-6,000+ ppm in a supplement designed for 1 oz/hd/day consumption. Most cattle supplemented at this rate in the survey appeared adequate when in known deficient areas. Minerals consumed at higher rates, should accordingly have lower amounts of zinc to match these levels. Levels should be evaluated against copper in the supplement as well.
2. What form is the zinc supplement? Studies have shown lower response to zinc supplementation when it is in the oxide form. Other acceptable forms include methionine, sulfate, and chelated (organic). Although more expensive, chelated forms tend to be the highest in bioavailability. All three forms, not oxide, have shown to work well in long term supplementation programs. However, for quicker attainment of adequate levels in deficient cattle, especially if antagonists like high sulfur drinking water are present, the chelated form of zinc may work best.
3. Is consumption adequate? Cattle don't store zinc for extended periods so knowing consumption is important. A 50 lb bag of mineral is 800 ounces. If it is designed for 1 oz/hd/day, 100 cows should finish the supplement in eight days. Consumption will vary, but on a seasonal basis, should match feeding directions. Supplement should be provided year round.
4. Injectable zinc has a short response time in terms of supplementation. This should not be the only source of zinc supplement in known deficient areas.



# Prescribed Fire on Private Lands Workshop

**Wednesday March 25, 2020**

**10:15 AM—3:30 PM**

**Glenn County Farm Bureau — 831 5th Street - Orland, CA 95963**

## **AGENDA**

- 10:15-10:30 Registration
- 10:30-10:45 Welcome & Introductions (**Martin Spannaus & Ritta Martin, Glenn County RCD**)
- 10:45-11:45 Options for prescribed fire on private lands, prescribed burn associations, liability, California state-certified burn boss, and common myths around prescribed fire (**Lenya Quinn-Davidson, UCCE**)
- 11:45-12:15 Reasons for using prescribed fire (**Josh Davy, UCCE**)
- 12:15-1:00 Lunch - **RSVP required by 3/23/2020**
- 1:00-1:45 Update from Humboldt County: prescribed burn objectives, project costs, burn windows, and bringing fire back to the people (**Jeffery Stackhouse, UCCE**)
- 1:45-2:00 Local landowner perspective on prescribed fire
- 2:00-2:15 CAL FIRE's Vegetation Management Program, other grant programs, and permits (**CAL FIRE representative**)
- 2:15-2:30 Air quality and smoke management (**Pakou Cha, Glenn County Air Pollution Dept**)
- 2:30-2:45 Suggested safety and personal protective equipment (**Jeff Stackhouse, UCCE**)
- 2:45-3:00 Burn planning considerations and unit preparation (**Lenya Quinn-Davidson, UCCE**)
- 3:00-3:15 Fire weather: useful websites and tools (**Jeff Stackhouse, UCCE**)
- 3:15-3:30 Interest in starting a Glenn County Prescribed Burn Association???
- 3:30 Closing & Thank You

**REGISTRATION FEE: \$20 (cash, check or online) - RSVP required by 3/23/2020**

**Register online:**

<https://www.eventbrite.com/e/prescribed-fire-on-private-lands-workshop-orland-tickets-97794683531>

**Or call the Glenn County RCD at (530) 934-4601 x 5**

**Ritta Martin, Program Coordinator: [ritta@glenncountyrcd.org](mailto:ritta@glenncountyrcd.org)**



# IRRIGATED PASTURE WORKSHOP

**Saturday, April 4, 2020**

**9:00 AM — 12:00 PM,**

***All are Welcome-No RSVP needed***

**Los Molinos Veterans Hall — 7980 Sherwood Blvd. - Los Molinos, CA 96055**

## **AGENDA**

- |                  |   |
|------------------|---|
| 9:00-9:15 a.m.   | Workshop sign-in and introduction   |
| 9:15-9:30        | Water district goals and water user participation to achieve them.<br><b>Bill Hardwick, General Manager, Los Molinos Mutual Water Company</b>                                     |
| 9:30-10:00       | Grazing management variables affecting irrigation timing and production efficiency on irrigated pastures.<br><b>Josh Davy, UCCE Livestock and Natural Resources Farm Advisor</b>  |
| 10:00-10:30      | How much water is delivered and what irrigation practices help shorten the delivery interval?<br><b>Allan Fulton, UC Irrigation and Water Resources Advisor</b>                   |
| 10:30 – 10:45    | Need technical assistance? Arrange an on-site evaluation of your irrigation system.<br><b>Kevin Greer, Irrigation Mobile Lab, Resource Conservation District of Tehama County</b> |
| 10:45-11:00      | Looking for financial assistance? <b>USDA Natural Resources Conservation District</b>   |
| 11:00-11:30      | Completing an irrigation and nitrogen management plan.<br><b>Emmy Westlake. Shasta Tehama Water Education Coalition</b>   |
| 11:30-11:45      | Demonstration of weed wiper and discussion of weed control in irrigated pastures.<br><b>Josh Davy, UCCE Livestock and Natural Resources Farm Advisor</b>                          |
| 11:45-12:00 p.m. | <b>Plant ID Jeopardy</b><br>Questions & Adjourn   |



**Allan Fulton**

UC Irrigation and Water Resources Farm Advisor  
Tehama, Glenn, Colusa, and Shasta Counties

*The University of California prohibits discrimination or harassment of any person in any of its programs or activities. (Complete nondiscrimination policy statement can be found at <http://ucanr.org/sites/anrstaff/files/107734.doc>)*

*Inquiries regarding the University's equal employment opportunity policies may be directed to John Sims, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, 2801 2nd Street, Davis, CA 95618, (530) 750-1397.*

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products not mentioned.



**Josh Davy**

UC Tehama County Director  
& Livestock / Natural Resource Advisor  
Tehama, Glenn, and Colusa Counties

**Prescribed Fire on Private  
Lands Workshop**

**March 25, 2020**

*\$20 Registration Fee*

For more information Contact Glenn County  
RCD (530) 934-4601 x5

**Irrigated Pasture Work-  
shop**

**April 4, 2020**

*This meeting is free to attend.*

For more information Contact Tehama  
Cooperative Extension Office (530) 527-3101

NON-PROFIT  
US POSTAGE  
Paid  
Red Bluff  
Permit No. 112

Cooperative Extension  
University of California  
1754 Walnut Street  
Red Bluff, CA 96080  
"52"