



THE NEW FOOTHILL RANCHER

...Practical Information for Foothill Livestock Producers

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Placer—Nevada—Sutter—Yuba Counties



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Raising Livestock on Rangeland is not an Indoor Sport!

Observations on Ranching during the Winter of 2022-23

Larry McMurtry's novel, *Lonesome Dove*, was published the year I graduated from high school (way back in 1985 - when I still had hair)! Four years later, the novel became one of my favorite television miniseries, featuring Robert Duvall, Tommy Lee Jones, and Danny Glover (among others). While there are a number of memorable scenes and lines (from both the book and the miniseries), one that sticks with me as a rancher is Augustus McCrae's eulogy for Danny Glover's character, Deets:

*"Cheerful in all weathers.
Never shirked a task."*



I've been reminded of this line frequently this winter - as we've had cold rain and wind here in Auburn, and as other ranchers in California have been dealing with never-ending snow. Rangeland agriculture - grazing sheep, goats, and cattle on the vegetation that Mother Nature provides - requires us to tend to our animals regardless of the conditions we (and they) are facing. We may not always be cheerful about unrelenting snow or sweltering heat, but if we've ranched for very long, we know that we can't shirk a task when it comes to our livestock.

But working in all weathers is much easier when we're intentional about our management systems and production calendars. We lamb on pasture, so we time our lambing to coincide with what is usually the onset of rapid grass growth in late winter (we're still waiting for rapid growth this year - see the next article). This system requires that our ewes have strong maternal abilities - that they can lamb mostly without our help, that they can turn our rangeland forages into enough milk for their lambs, that their lambs get up and going quickly, and that they can count at least to two. Rather than trust to luck, we've utilized an objective selection process that allows us to keep our best ewes and their daughters, while culling the ewes that don't measure up.

Our intentionality extends to our grazing management. On our winter rangelands, we have open hillsides that we graze before lambing begins,

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which allows us to save the more sheltered areas (with trees, brush, and topography that provide shelter from wind and rain) for lambing. We watch the weather diligently during lambing season - while sheltered paddocks are important, there's no better shelter for a lamb than a belly full of milk. If we know we have cold or wet weather coming in, we'll move the ewes to fresh feed so that they don't have to walk very far to fill their rumens with forage. And we've found a cost-effective, biodegradable plastic raincoat that helps keep the youngest lambs warm and relatively dry in really nasty weather.

Even the best management planning can't change the weather, though. Sometimes, like January-March last year, it doesn't rain at all. We adjusted by building larger paddocks in steeper terrain to give the ewes access to more forage. Sometimes we get sleet or even snow in early March; we adjust to these conditions by increasing the number of times we check the sheep (including checks every two to three hours during the night). This year, due to some extenuating family circumstances, we've purchased feed for the ewes to supplement what they are able to graze during the recent stormy stretch.

And despite our best planning efforts, sometimes Mother Nature simply doesn't cooperate. I have friends who are spending 16-person-hours a day feeding the cows they can find in four feet of snow - and arranging for helicopters to drop hay to the cows they can't reach. Other friends have hauled sheep and goats to higher ground during lambing and kidding - lining up trucks and building corrals on very short notice can be extremely stressful. This diligence is more than just an economic consideration; caring for animals is a responsibility that goes well beyond dollars and cents.

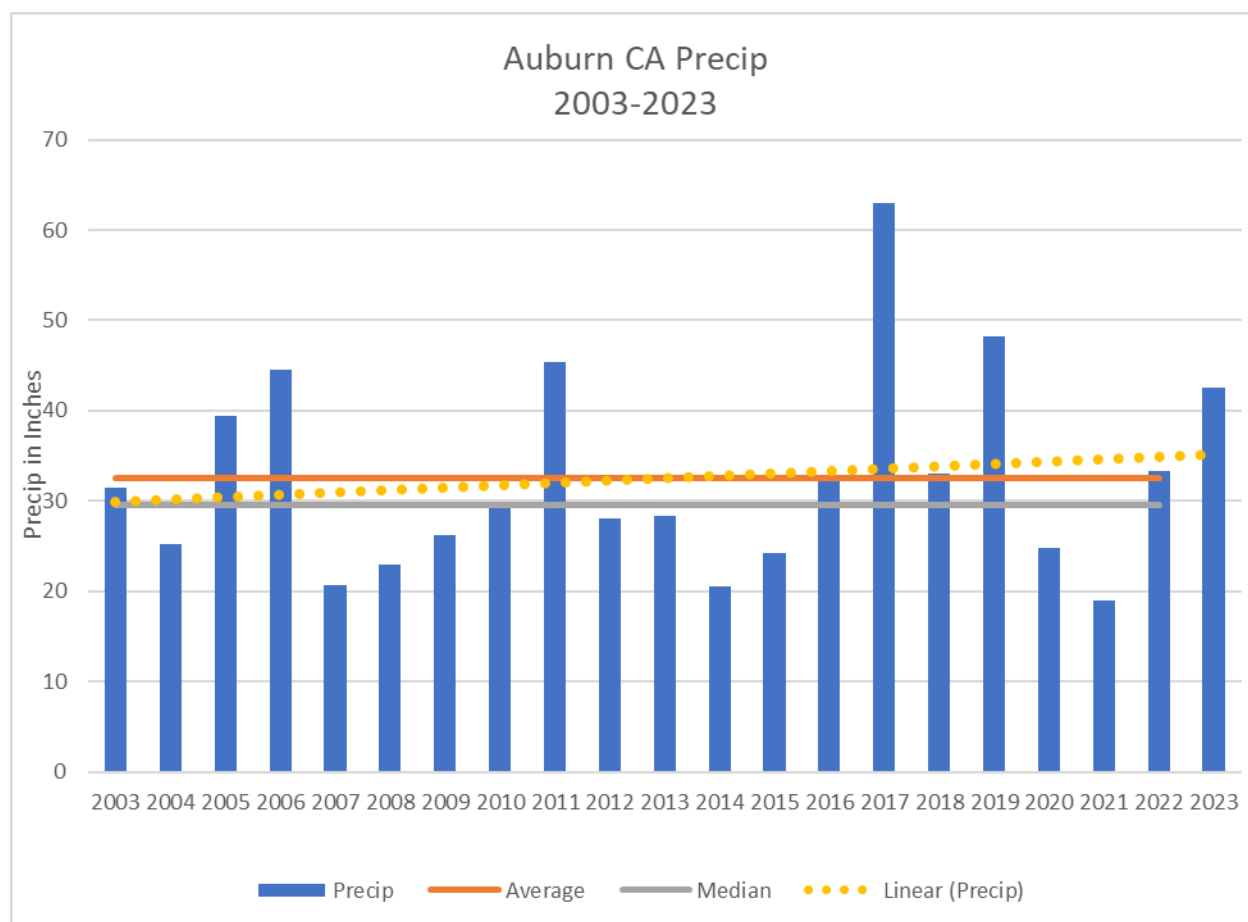
Finally, I suppose that being intentional extends to our wardrobe and equipment choices as ranchers. My friend John Helle, who ranches in western Montana, says his Norwegian grandfather used to say, "There's no bad weather, only bad clothing." Someone else once told me, "don't buy cheap boots or cheap cold or wet weather gear - you'll always be sorry." As I get older, being cheerful in all weathers (or at least being less grumpy in bad weather) is directly related to my own comfort and safety. Wool clothing, Gortex™ rain gear, and waterproof boots are part of my winter wardrobe; my summer gear includes broad-brimmed hats and sunscreen!

In early March, we held our annual Pasture Lambing Workshop. With rain and sleet in the forecast, several folks canceled at the last minute - but the two young women who did show up were enthusiastic and eager to learn. We talked about the planning and preparation that goes into any successful rangeland-based production system - planning that allows us to trust our animals and trust ourselves to cope with whatever the weather throws at us!



No Such Thing as an Average Year

Looking back at more than 20 years of precipitation data I've collected since my family moved by Auburn, I can't say that we've ever had an "average" year – that is, we've never had exactly 32.48 inches of rain. Some years, like 2016-17, we measure quite a bit more than average (62.96 inches, to be exact); other years, like 2020-21, we measure less (just 19 inches). Since I started keeping track in 2003, we've had 12 years with less than our average, and 6 years with more than average (the balance – 3 years – have been close to average). Since 2007, we've experienced several 2-4 year stretches of below average rainfall – including the memorable droughts of 2012-2015 and 2020-2022. Interestingly, though, the trendline on my data suggests that our "average" precipitation has increased slightly since 2003.



But as anyone who manages livestock on our annual rangelands will tell you, the amount of rainfall we receive is only part of the story – timing and temperature (both soil and air temperature) are key drivers in rangeland forage production. The last two years have provided a stark example!

Think back to mid-March 2022. After an exceptionally wet start to the water year (in October 2021), we had a good start on our rangeland forages – they'd germinated in late October and had grown through early December. But in January 2022, the faucet shut off – we received less than 2.5 inches from January 1 through March 31 – by some accounts, it was the driest January-March on record. I recall checking soil moisture by feel on the rangelands where our sheep were grazing in mid-March 2022, and finding that we had less than 25% moisture – more like May conditions.

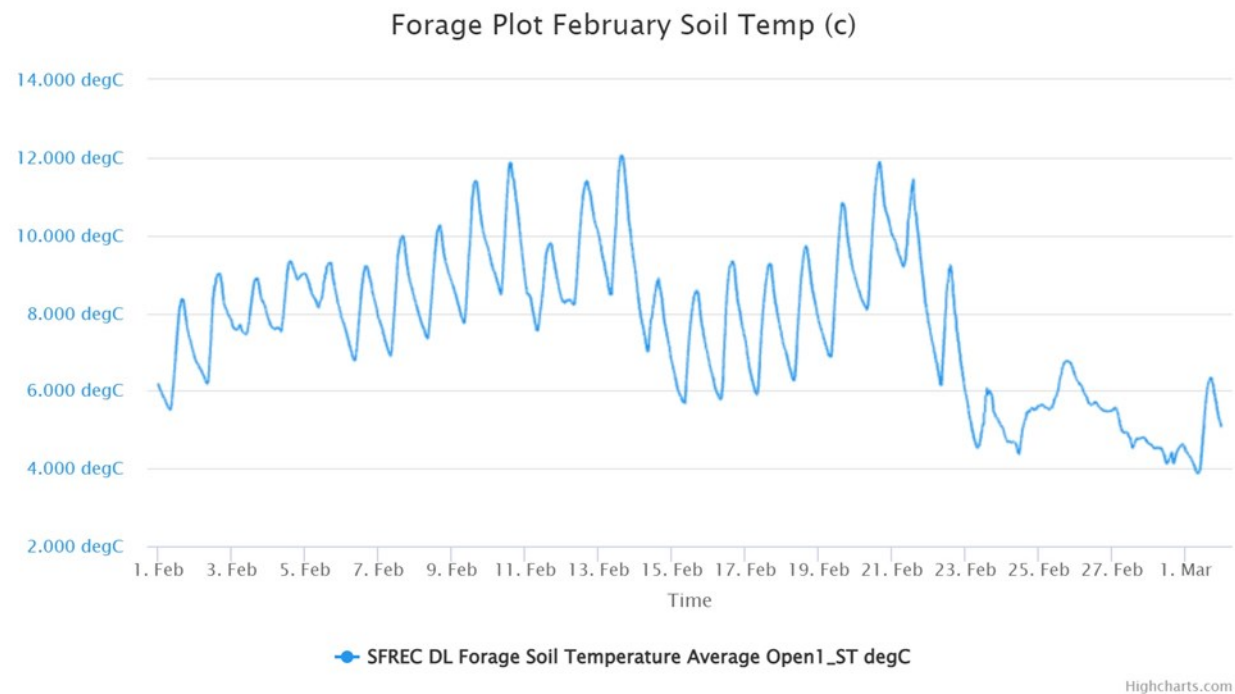
Despite these dry conditions, however, the UC Sierra Foothill Research and Education Center (SFREC) measured 1,412 pounds of forage per acre on March 1, 2022 (187% of "average" for the date). Rain returned in April

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2022, and total forage production at SFREC ended up being 122% of the long term average (just over 3,800 pounds per acre).

In the autumn of 2022, our germinating rain came nearly a month later than the year before – which meant the rangeland forage didn’t have much time to grow before the short days and cold temperatures of December forced it into dormancy. A wet and cold December was followed by a wetter (if somewhat warmer) January 2023. While February was slightly drier than “average,” March turned wet and cold again. As of this writing (March 17), we’ve measured over than 24 inches of rain in Auburn since the first of the year!

Even with all of this moisture, however, forage production at SFREC is lagging significantly behind last year. On March 1, SFREC measured just 619 pounds per acre (less than the long term average for that date of 750 pounds). As you might expect, soil temperatures followed the cooler air temperatures in late February; cold soils mean little or no forage growth.



Stated another way, we were in a drought on this date last year – and we had more forage than “average.” This year is shaping up to be one of the wetter years since I’ve worked in the foothills – and we’re short on feed at the moment. With long days and warmer temperatures coming, I suspect the forage will explode in April, but for now, feed conditions in the foothills are tight!

So how do we manage through this kind of uncertainty? During our [Working Rangelands Wednesdays](#) webinar series last year, Dr. Leslie Roche (our Cooperative Extension Specialist in Rangeland Management) suggested that while the total amount and seasonable distribution of precipitation are the biggest drivers for annual forage production, specific timing is also critical. November and April precipitation are especially critical. A statewide collaborative effort is ground-truthing remote sensing technology that will hopefully provide real-time forage production data without needing an army of range technicians clipping plots on a weekly basis. All of this information will help ranchers make decisions about seasonal and annual adjustments to our stocking rates, but good management will always require careful planning and on-the-fly adjustment to this year’s conditions. There’s no such thing as an average year!

Is *YOUR* Ranch Ready for Wildfire Season?!

While fire season may seem like a long way off at the moment, summer will be here before we know it!

Check out our [Wildfire Preparation Strategies for Commercial Ranchers](#) fact sheet and planning template – and get a jump on wildfire season!



producers with operations inside evacuation zones. Passholders work with UCCE and county agriculture departments to obtain permission from incident commanders to re-enter evacuation zones when it is safe to do so, **for the purpose of feeding and caring for livestock.**

In 2022, the program expanded by 68% - 72 producers obtained passes. New producers participated in a 4-hour training session hosted by UCCE, local agriculture departments, CALFIRE, and local law enforcement/emergency management agencies at the UC Sierra Foothill Research and Extension Center (with lunch generously sponsored by the Sutter-Yuba Farm Bureau). Renewing passholders participated in an online refresher training developed by UCCE. While passes were not formally used during the 2022 fire season, the pass program created positive working relationships between the ranching community and first responders. These relationships resulted in opportunities to help address producer and livestock safety during the Rices Fire in Nevada County and the Mosquito Fire in Placer County.



The California State Association of Counties recognized the Nevada-Placer-Yuba program with a 2022 Challenge Award in the Rural Disaster & Emergency Response category, citing the program's innovative tri-county partnership and proactive approach to addressing both public safety and livestock well-being.

2022 Program Statistics

- 28% of passholders had operations in more than one county. On average, passholders operated on 2.4 individual properties.
- 35% had multiple species of livestock.
- 38% of passholders operated in Nevada County; 21% in Placer, 29% in Yuba, and 11% had operations outside of the 3-county region.
- Participation by livestock species:
 - Beef Cattle: 65%
 - Sheep: 32%

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- Goats: 19%
 - Poultry: 19%
 - Bees: 15%
 - Hogs: 8%
 - Rabbits: 7%
 - Dairy (Goats or Cattle): 6%
 - Other Livestock: 11%
- 86% were owners or family members of commercial operations; the balance were employees.

Looking Ahead – 2023 Program Update

Governor Newsom signed AB 1103 (sponsored by Assembly Woman Megan Dahle) in October 2021. This legislation creates a statewide livestock pass program, with new statewide training due out in 2023. Once this new curriculum is rolled out, we will be scheduling training for new and renewing passholders in all three counties! If you'd like updates on these training sessions, or the program in general, contact me at dmacon@ucanr.edu or (530) 889-7385.



Parasite Control in Organic Livestock Production Survey

By Dr. Alda Pires, Cooperative Extension Specialist for Urban Agriculture and Food Safety

In the past several years American demand for organically produced animal products has increased tremendously leading to the subsequent boom in the number of organic farms. However, under organic production systems the use of dewormers drugs is regulated, challenging the success of these operations.

At UC Davis School of Veterinary Medicine and UC Agriculture Natural Resources Cooperative Extension, we have designed a survey aimed at **cattle, sheep, or goat** producers that are

Certified Organic, in transition to be certified, or implementing organic practices. **Our goal** is to learn about: a) dewormers drugs used and the perceived efficacy, and b) integrated parasite management practices and their perceived efficacy.

Survey results will help us to identify critical areas that need additional research or extension services related to parasites management in organic production.

The questionnaire will take approximately **10-15 min** of your time. All responses are anonymous; no identifying information will be collected. The survey will remain open through **April 15th, 2023**.

https://ucdavis.co1.qualtrics.com/jfe/form/SV_77pA9H94xKMA27s

Thank you for contributing, we highly value your input. Please forward to others and encourage participation. If you have any questions, comments, or concerns please contact the principal investigators (Dr. Alda Pires pireslab@ucdavis.edu and Dr. Noelia Silva del Rio, nsilvadelrio@ucdavis.edu) or Teresa Miranda at teresa.fernandes.miranda@gmail.com.

Tentative 2023 Workshop Schedule

(Stay Tuned for Exact Dates & Locations!)

Date	Workshop Topic(s)	Location
Late April – Early May	Livestock Pass Training	Placer County Nevada County Yuba County Online (for renewing passholders only)
May 6	Tahoe Cattlemen’s Association Ranch Tour	Lincoln and Sheridan, CA
June 14-15 (tentative)	Targeted Grazing Academy	Placer County
June 24 (tentative)	Weaning Lambs / FAMACHA Training	Auburn, CA
September	Conserving and Restoring Oaks on Working Rangelands	Placer County
September – October	Calving School and Beef Quality Assurance Update	SFREC
October	Ecology and Economics: Incorporating Ecological Planning into your Ranch Business	Auburn, CA
Autumn	Integrating Livestock into your Cover Crop System	TBA

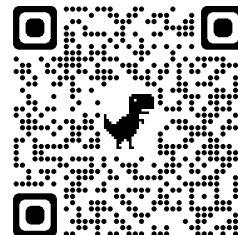
Can't Make the Webinar? Check out these Virtual Learning Opportunities!

Can't make it to a webinar or a field day? Wish you could remember what that speaker said during the workshop? Want to take a deeper dive into livestock guardian dogs? Or maybe you just want to see why Dan Macon and Ryan Mahoney decided they had faces made for podcasting!

Check out the [Ranching in the Sierra Foothills YouTube Channel](#),



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UC COOPERATIVE EXTENSION
LIVESTOCK and NATURAL RESOURCES Program?

Please take this short survey to help me better meet your information needs!

<http://ucanr.edu/livestockinfosurvey>

For a hard copy of the survey:

Please call (530) 889-7385 or email me at dmacon@ucanr.edu.

Thank you!

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