



# Ranch Roundup

Greetings from the Farm Advisor,

Here we are, the first week in June, and I feel like summer has finally arrived. The temperatures have hit 80 degrees and the rain has subsided for now. The lightning and thunder storms this spring reminded me of the summer rains back in Iowa, what a show. Glad to see all the moisture but it is now time to dry up so we can get into the field. I nearly planted my garden last weekend before I noticed the freeze warning this coming Friday night, must almost be Junior Show.

We are busy ramping up for the 71st Junior Livestock Show this week at the office and remind you to attend events all week but especially the community dinner and sale **Friday June 14 at 5:00pm.**

I am also excited to announce a joint **Modoc and Lake County Cattlemen's field day June 30th** near New Pine Creek. Check out the details in the newsletter and plan to bring the whole family for a tour and BBQ.

UCCE Modoc will be bringing on several summer seasonal staff this summer working on projects throughout the county. More details are in the research briefs section. Make sure to say hello when you see them. Looking forward to a great summer field season.

Sincerely,

*Laura Snell*

## Beef Fact Corner

Did you know that in the United States, beef production (including the production of feed) is only responsible for 3.3% of greenhouse gas emissions?

And that cattle consume 2.6 lbs of grain per pound of beef which is similar to pork and chicken and that 90% of cattle feed is inedible by humans?

Facts from: Environmental Footprints of Beef Cattle Production in the United States.

## UCCE RESEARCH UPDATE

I am excited about the upcoming 2019 field season. With the help of five full and part time staff through the summer, we will accomplish projects on private and public land throughout the county. Here is a review of some of our projects. If you would like any additional information or have suggestions for further research, please feel free to call me at 530-233-6400 or email [lksnell@ucanr.edu](mailto:lksnell@ucanr.edu)

### **Warner Mountain Meadow Monitoring**

This year will be the fourth year putting cages out in meadows throughout the Warner Mountains. Along with the annual production cages, we monitor stream bank alteration, stubble height, browse species use such as willow and shrubs, and conduct landscape appearance annual use. This is part of a statewide meadow monitoring project which tests how long term use metrics fit with annual monitoring and evaluates modern public land grazing practices.

### **Irrigated Lands Research**

Research plots were established in three irrigated pastures from Likely to Willow Ranch in 2017. 2019 will be the second full year of data collection looking at how irrigation water, pasture species, fertilization, haying, grazing, and management height affects production. Modoc County sites are part of a larger statewide project looking at these factors in perennial and annual pastures. The study aims to evaluate management practices in irrigated pastures and establish production baselines.

### **Wild Horse Monitoring**

This year we will finally have all the photographs analyzed from the last three years of trail camera work and the riparian spring conditions will be compiled. The next step is using occupancy theory to detect the amount of time wild horses, livestock, and wildlife are spending at each of the spring sites and compare it to riparian conditions.

To add to this study, we will be adding a different occupancy model this year by adding observation and video cameras to several springs. This study design provided additional information on multi-species interactions in Nevada that the current study doesn't completely address. We look forward to the outcomes.

### **Big Valley Groundwater Research**

In partnership with the North Cal-Neva RC&D and Modoc County, UCCE Modoc was successful in getting a grant from the Department of Water Resources (DWR). The grant provides funding to drill four groundwater monitoring wells, conduct water monitoring and sampling, and develop a feasibility study of adaptive management options for the basin.

This is all part of the **Big Valley Groundwater Sustainability Plan (GSP)** development being pursued by Modoc and Lassen Counties. Big Valley was established as a medium priority basin and DWR requires a plan written by 2022. This plan allows local agencies to maintain control of groundwater resources versus allowing the state water resources control board to dictate water use in Big Valley. Lassen County in partnership with GEI Consulting Inc. received a grant to write the groundwater plan.

The first of many public meetings was held in Bieber June 3rd to accept public comments and talk about the progress all groups have made in monitoring and plan development.

UCCE Modoc has hired one full time and two part time staff members to help in development of a feasibility study and conduct monitoring. Some of the adaptive management options being looked at to mitigate "undesirable results" in Big Valley include: winter flood irrigation recharge, invasive tree removal and forest thinning, different types of irrigation and cropping systems including cover crops and tillage, and restoring surface water stream function. DWR established undesirable results as lowering of groundwater levels, reduction of groundwater storage, degraded water quality, land subsidence, depletion of interconnected surface water and in some areas seawater inclusion.

The additional data provided by the UCCE Modoc grant will be added into the GSP, providing the best science available to be used in plan development. The feasibility study aims to think out-of-the-box and provide options for compliance in Big Valley that are not just the typically increase taxes and decrease pumping actions taken by other basins. The unique characteristics of Big Valley provide opportunities for groundwater sustainability and longevity not available in other parts of the state.

## MODOC COUNTY AND LAKE COUNTY CATTLEMEN FIELD DAY— JUNE 30



**Save the Date!**

### **Cattlemen's Spring Field Day**

**Join Modoc County and Lake County Cattlemen for a tour, socializing, and BBQ  
June 30th, 2019 10:00 am New Pine Creek, CA**

**Meet us at 10:00 am at the Jasper Cattle Ranch**

-From Hwy 395, Jasper Cattle Ranch is west on Co Rd. 47, follow brown historical signs to Willow Ranch.

**Tour topics including cattle and livestock, irrigated pasture research, historic Willow Ranch,  
biomass, and wild plum winery and more**

Social Hour and BBQ to follow about 3:00pm at **Stringer's Orchard Winery and Distillery**

Sponsored by **American Ag Credit, and Modoc and Lake County Cattlemen and Women**

From Hwy 395, Stringer's Orchard is 1 mile south of New Pine Creek on the east side of the road

Detailed agenda will be out soon

RSVP or questions to Jess Dancer at 970-846-2769

The field day will showcase several research studies in Modoc County with University of California Cooperative Extension, discuss current trends in bull and replacement heifer selection, provide an opportunity to tour the new Lakeview biomass facility, and visit Stringer's Winery and Distillery. Oregon State University Extension Service and the Lake County Stock Growers are excited to participate in the field day and BBQ as well. This is a great opportunity to meet producers from Modoc and Lake Counties, discuss current trends in pasture and livestock management, and visit a couple local businesses. All are welcome including families to attend the tour and BBQ. Cattlemen are invited to bring a dessert to share.



## ON A RECENT DRIVE IN SURPRISE VALLEY

### Cheatgrass and Scotch Thistle Management

**Tom Getts, UCCE Weed and Cropping System Advisor Modoc, Lassen, Sierra, and Plumas Counties**

I was recently driving around Surprise Valley, and it was as green and as wet as I have seen it. Far different than when I moved here in June of 2015. I noticed two things: an excessive amount of cheatgrass in irrigated hay fields, and huge amounts of Scotch thistle rosettes just about to bolt above the grasses.

Cheatgrass is most easily controlled physically or chemically in the winter or early spring when it is small. Now, as the cheatgrass is mature, the options for control are very limited. Cutting the hay before the seeds are set can be an option, but with the three weeks of thunderstorms, cutting has not been an option. It is important to target cheatgrass early and prevent it, as hay with cheatgrass seeds can be difficult to sell because the seeds can cause physical injury to livestock and introduce seeds to new areas. Mark areas in the fields infested with cheatgrass for active control efforts next fall and spring.

It is not too late to target the Scotch thistle (which is quite widespread throughout Modoc County). Scotch thistle is an A rated noxious weed in California, and if you have it on your property you are required to control it. Scotch will completely take over dryland pastures and natural ecosystems displacing more desirable vegetation, impacting wildlife and livestock alike. The seeds have a decades long soil seed life, so it is of utmost importance to keep them from going to seed. Once in the seedbank, research has found dormancy can be linked to a water soluble germination inhibitor, so in wet years, you can have tremendous flushes of thistles!

The best time to control Scotch thistle (like cheatgrass) is when the plants are small. Unlike cheatgrass, which is a winter annual, Scotch thistle typically is a biennial plant and grows vegetatively in a rosette the first year before bolting and flowering the second year. Rosettes can be controlled with much less effort than bolted plants.

Digging the plants with a sharp shovel below the soil surface can be a great way to target these rosettes in either the spring or the fall. Likewise, for larger thistle patches, various chemical methods can be very effective for controlling these plants. Recent research in Lassen County showed that Milestone, Grazonnext, Method, and Telar can all be good options for controlling rosettes. Fall applications of Telar gave 85% control 23 months after application. Milestone, Grazonnext, and Method gave 90% control 16 months after treatment. 2,4-D + Banvel initially gave good burn-down of emerged rosettes, but there was little control the growing season following application.

Bolting Scotch plants are much more difficult to control than rosettes, but they need to be targeted before seeds are set! Digging with a sharp shovel can still offer effective control, but getting close enough to the plant to dig successfully can be difficult. I have known landowners to use the shovel as a baseball bat to knock down the leaves on the plants just so they can gain access to the root crown. Likewise, spraying bolted plants can be moderately effective, and is certainly better than doing nothing! While research has shown no spray will give 100 percent control of bolted plants, there are some options. Applications of Telar, Telar + 2,4-D, or 2,4-D plus Banvel, can offer fair control of bolted plants, reducing viable seed set. Milestone is not an effective treatment for controlling bolted Scotch thistle plants. Managing Scotch thistle will take a multiple year effort, so whatever you do this year will pay dividends in the future.

Get out there and treat your Scotch thistle before it goes to seed! Make sure to mark the areas with infestations, so follow-up management efforts can be implemented in the fall!

(Whenever using a pesticide make sure to read and follow the label. Before a pesticide is applied, proper sprayer calibration and training should take place. Any mention of pesticide above is not an endorsement or recommendation of pesticide use by myself or the University of California. Pesticides are mentioned by trade names for informational purposes only, and are not an endorsement or recommendation over other pesticides not mentioned.)



From Left to Right: Control treatment, Telar 21 months after a fall rosette application, Grazon 14 months after spring rosette treatment. Both Telar and Grazon treatments show 85%-90% treatment compared to control plots.

# MODOC-WASHOE EXPERIMENTAL STEWARDSHIP



After 39 years of attending Modoc Washoe ESP meetings, **Bill Phillips** is retiring his post and moving to Kansas to be closer to family. Bill attended the very first ESP meeting in April of 1980 as the range conservationist for the BLM Susanville District. He remembered having to chain up to get over Cedar Pass for the meeting. Around 1980, several ESPs were formed with a diverse group of participants across the west. They were formed out of a challenge to find ways to improve range management and use sound science, technical review teams, and experimental programs to address potential large cuts in permitted livestock. Bill was assigned to work with ESP by his boss, Rex Cleary who was instrumental in forming the Modoc Washoe ESP. When Bill retired from the BLM in 1995, he joined the committee as a member, representing wild horse and burro interests. Bill believes he has never missed a meeting in 39 years. He can be seen above giving a talk on the complexities of how plants interact with the sun, air, soil, and water to create sugars that grazing animals consume for energy. The Modoc Washoe ESP has been instrumental in addressing range management concerns in the program area for nearly 40 years. One of the most well known projects is the grazing fee credit program which allows permittees within the program area to use up to half of their grazing fees for approved range improvements, herding, and additional third party monitoring. Technical review teams have provided assistance to countless environmental analysis and other NEPA reports, provided comments for congressional actions, agency proposals, and local projects.

**Join us to celebrate Bill's extraordinary ESP career at the Brass Rail in Alturas - June 19 at 6pm.**

On June 19 the Modoc Washoe-Experimental Stewardship Program will meet for a field tour at Lassen Creek Campground. This tour in partnership with the Goose Lake fisheries working group will look at grazing, timber, wildlife and fisheries management, and recreation near Lassen Creek. On June 20, the ESP committee will meet for their spring meeting at the Cedarville BLM office from 9am-3:30pm. All are welcome to discuss sage grouse, grazing fee credits, wild horses, vacant allotments and the Lassen Creek Permit renewal. ESP serves the Warner Mountain ranger district and the historic Cedarville BLM office district.



## Modoc Washoe Experimental Stewardship Program and Goose Lake Working Group Spring Tour!

Wednesday, June 19, 2019  
9:30 am Lassen Creek Campground

### Tour Topics

- Lassen Creek Grazing Environmental Analysis
- Fisheries Restoration Then and Now: Monitoring, Fish Barriers and More
- Timber Research and Lassen Timber Sale
- CDFW Black Bear Research
- Forest Recreation

Directions to Lassen Creek Campground: Take Hwy 395 (21 Miles South of Lakeview or 31 Miles North of Alturas), turn east on Co Rd 30 (36N30) and continue for 6 miles, the campground is on the right.



Make sure to bring a sack lunch, water, proper field shoes and attire, and dress in layers.



## FOREVER 4-H

UCCE Modoc County has begun an endowment campaign to support 4-H in Modoc County. We recently received an opportunity for a \$20,000 match donation. We have fundraised nearly \$10,000 for the endowment already and would like to reach our goal of \$20,000 by the end of 2019. Thank you to everyone who has already donated and if you are interested in making a donation, please visit our office at 202 West 4th St. Suite B or donate online at <https://ucanr.edu/sites/4hfoundation/>



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EXTENSION**

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## FUTURE EVENTS OF INTEREST

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- Modoc Junior Livestock Show June 10-14  
Alturas Show Grounds
- Experimental Stewardship Program Tour June 19  
Lassen Creek Campground 9:30am
- Experimental Stewardship Program Committee Meeting June 20  
BLM Cedarville Office 9:00am
- Modoc and Lake County Cattlemen Field Day June 30  
Willow Ranch 10:00am