



*April 2016*

## NEW LIVESTOCK AND NATURAL RESOURCES ADVISOR



I would like to introduce myself, I am Carissa Koopmann Rivers, a 5<sup>th</sup> generation cow/calf rancher from Sunol, California. I grew up with a passion for livestock and everything related to livestock production, particularly rangeland management and wildlife/livestock interactions. In addition to helping on the family ranch, I started managing my own set of purebred Red Angus cows in 2001.

In 2009, I earned my B.S. in Animal Science (Production Management) from California

State University, Fresno and my Master's degree in Integrated Resource Management from Colorado State University in 2015.

Prior to starting with UCCE in February, I was with UC Davis Plant Science Department working with Ken Tate and Leslie Roche in the Rangeland Watershed Laboratory. My research was focused on interactions between beef cattle production and water quality conditions on California rangeland watersheds.

Previously, I managed a 7,000 acre working livestock ranch for Audubon California, a national non-profit organization. The goal of the ranch was to develop and maintain a research, education and outreach hub for economically and ecologically feasible conservation practices on California rangelands.

In late 2015, I moved to Siskiyou county with my husband Vic and now 6-month old daughter Bray Lynn. I am a member of the California Cattlemen's Association; serve on the board of directors for the California Beef Cattle Improvement Association; and a past director of the Yolo County Cattlemen's Association. I am looking forward to becoming active in local organizations to better serve ranchers and land managers in the county!

My goal as new advisor is to recognize common needs, conduct science to accomplish mutual goals and to bridge communication gaps between agencies and producers. I look forward to working in collaboration with local producers, industry organizations, and public agencies to develop science-based information focused on livestock production and rangeland quality in Siskiyou County.

You can contact me at the UC Cooperative Extension Office in Yreka at 1655 South Main Street or (530) 842-2711 or [ckrivers@ucanr.edu](mailto:ckrivers@ucanr.edu). I am looking forward to working with you!

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## UPDATE: FOOTHILL ABORTION VACCINE PROGRESS

Dr. Jeffrey Stott, researcher and professor of pathology, microbiology and immunology at the University of California, Davis and his team have been moving forward with the foothill abortion vaccine trials. The first year of field trials is wrapping up successfully vaccinating just under 10,000 animals in CA, OR, and NV.

A small, local pharmaceutical company is working on commercializing the vaccine but have not released a tentative date of when it might be available for commercial purchase. Dr. Stott presumes it is at least one year out.

### Who can Participate in the Vaccine Trials?

Any producers located in a Foothill Abortion endemic region (which is California, Northern Nevada and Southern Oregon) are invited to participate in the vaccine trials. Producers must have a minimum of 20 heifers/open cows to vaccinate.

While the vaccine is intended for use primarily in replacement heifers, older animals can be vaccinated if they meet trial guidelines. The females must be open and the vaccine must be administered at least 60 days prior to breeding. Fetal loss will not occur until 100-140 days post-vaccination if the animal is exposed to a bull within a 60 day window or if she is already bred at the time the vaccine is administered.

The vaccine must be administered by either Dr. Stott's laboratory or by a veterinarian who has previously received hands-on training for managing the trial, required documentation and product handling instructions.

### What is the Cost?

CCA is requesting a donation of \$800 for every vial (30 doses/vial) of vaccine. This donation will support continued production, distribution and record-keeping of the vaccine. Sharing the cost of a vial (30 doses/vial) of vaccine between multiple small breeders is not possible because vaccine transport



and administration authorizations are obtained from State and Federal Agencies, along with vaccine transported and trial summary "reports" that are prepared for each individual producer.

### Other information

No formal studies have been conducted to determine if any interference may occur, reducing effectiveness of either the trial vaccine or other concurrently administered treatments, but no evidence has been noted to date that would suggest that other vaccines have a negative impact on the efficacy of the foothill abortion trial vaccine.

The vaccine can be administered in conjunction with other vaccines though they should be administered on the opposite side that the animal receives the trial dose to assist in data used to facilitate the licensing of the foothill abortion vaccine.

The age of females at the time of receiving the vaccine has not been a focus of the trial. Vaccine efficacy has been confirmed in animals treated at one year of age. No evidence has been noted that would suggest vaccination of animals as young as eight months of age compromises efficacy.

*For information and questions regarding the program, obligations of the participating ranches and how to sign up for the vaccination trials please contact California Cattlemen's Association intern Valeria Garcia at 916-955-7931 [valeria@calcattlemen.org](mailto:valeria@calcattlemen.org) or Carissa at the Siskiyou County Cooperative Extension office at 530-842-2711 or [ckrivers@ucanr.edu](mailto:ckrivers@ucanr.edu).*

\*Information in this article was provided by Dr. Jeffery Stott, UC Davis.

# YELLOW STARHISTLE MANAGEMENT

\*Adapted in part from Siskiyou County Publication: Management of Yellow Starthistle in Siskiyou County by Steve Orloff and Dan Drake.

It is important to understand the biology of yellow starthistle (YST) in order to develop an effective management plan. YST is an annual weed, germinating from seed, completing its life cycle in a single season. It germinates over a prolonged time period—with the first rains in the fall through late spring—when temperatures and moisture are adequate growing low to the ground (as a rosette) and later in our area sending up a stalk (bolts) in late April to June. Spines develop in June and the plant flowers from July into September.

Because of its deep taproot, YST is able to out compete most other vegetation accessing deep soil moisture unavailable to other plants.

YST loses its competitive advantage under irrigated conditions, and is therefore rarely a problem in irrigated fields unless irrigation is inadequate.

The overwhelming majority of seeds produced germinate within the first two to three years. Therefore, the key for any yellow starthistle program to be effective in the long run is to eliminate YST seed production for at least 2 to 3 consecutive years.

There are several tools available to battle starthistle (see table below). The effectiveness of each control method varies and the method of choice depends on YST density, area size, equipment available, and intended use for the site.

CONTROL METHOD	RELATIVE EFFECTIVENESS	TIMING	COMMENTS
<b>Hand weeding</b>	Very effective	Whenever present	<i>Only feasible for small areas with low infestation level.</i>
<b>Tillage</b>	Effective short term	Prior to flower initiation	<i>Must be repeated whenever yellow starthistle is present. Usually not a desirable long-term strategy.</i>
<b>Mowing</b>	Partial	Flower initiation	<i>Degree of control depends on growth form and height at which bra</i> <i>Yellow starthistle usually regrows and repeat mowing is required.</i>
<b>Grazing</b>	Partial	Bolting—pre-spiny	<i>Typically, not effective because must graze after bolting when yellow starthistle less palatable. Earlier grazing may exacerbate YST problem.</i>
<b>Burning</b>	Partial	Flower initiation	<i>Use extreme caution. For effective control must burn at flower initiation (typically July). Fire hazard severe at this time.</i>
<b>Herbicides</b>			
2,4-D	Partial	March–April	<i>Controls seedlings, but normally repeat applications needed to control plants that emerge after application.</i>
Transline or Milestone	Very effective	Feb–early May	<i>Single application provides season-long control. May be difficult for small landowners to use without custom application.</i>
Roundup	Effective	July–Sept	<i>Non selective, meaning it will also kill desirable plants. Best suited for spot treatment of plants that escape other treatments.</i>
<b>Biological control</b>	Some-what effective	Releases not recommended	<i>Several Bio-control agents already present. Most only reduce seed production. Compliments other control measures. Bio-control alone has not adequately controlled yellow starthistle.</i>
<b>Reseeding</b>	Partial	Feb–early March	

## An integrated approach

Utilizing several of these control measures is best for long term control. For example, treatment with Transline® or Milestone in combination with a wheatgrass seeding is an effective program. The patent on Transline® expired several years ago resulting in a flood of clopyralid products. While Milestone® can control other noxious plants including fiddleneck, it is more broad-spectrum than clopyralid, which may create collateral damage to desirable plants, but it has longer soil residual

activity, which can be desirable for YST control during seasons with many late-germinating seeds. Or, mowing followed by late-season spot spraying with Roundup® works well in controlling small infestations.

Complete eradication of YST is not likely—however, using the methods discussed, YST can be successfully controlled on individual fields with a concerted effort and prevention of reinvasion and spread into new area.



Photo by Kathy Keatley Garvey

For more information on YST, visit <http://www.cal-ipc.org/ip/management/yst.php> or to learn of potential effects of herbicide residues in manure compost visit <http://smallfarms.oregonstate.edu/sfn/wtr11Aminopyralid>

## **Wolf update**

With the current status of Gray Wolves in California it is important for us to stay up to date on the topic. Gray wolves are listed as an endangered species under both the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). Fish and Wildlife put out a proposal in June 2013 to federally delist the Gray Wolf. It has been two years since they have accepted any new public comments. After reviewing over 1 million comments, they are now waiting to make a final decision on whether to remove the wolf from the federal endangered species list or not (Noelle Cremers, California Farm Bureau Federation).

### **What is CCA's Role?**

Kirk Wilbur, Director of Government Relations at the California Cattlemen's Association shares that CCA has participated in the Wolf Stakeholder Group for the Department of Fish and Wildlife's Wolf Conservation Plan for two years. While the Wolf Conservation Plan ultimately released by the Department is not in line with what CCA would like to see, however, the most recent draft did state that the department anticipates collaring some wolves, notification to producers, and the possibility of increased wolf management options in latter phases of the Plan if California law changes.

CCA objected to the language stating that take of any kind is prohibited. "Take" is considered "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (California Department of Fish and Wildlife Wolf Depredation Protocol for Livestock Producers)." CCA will continue to lobby the Department of Fish and Wildlife and Fish and Game Commission for more practical management tools.

CCA opposed the listing of the Gray Wolf under the California Endangered Species Act (CESA) and is currently considering a lawsuit which would sue the Fish and Game Commission over their illegal decision to list the Gray Wolf as endangered in California.

### **What is the University of California Doing?**

UC Rangelands and UCCE are developing an economic evaluation to measure the direct and indirect economic effects of predators, especially wolves on commercial-scale livestock production. This tool will measure effects on livestock performance, reproductive success and

labor/overhead costs. It will include producers both within and outside of the current wolf range. The evaluation will be conducted at these operations for 15 years, expanding to new operations as wolf ranges change. We will begin contacting producers to participate in the evaluation this spring. For more information, contact Carissa Rivers at 530-842-2711 or [ckrivers@ucanr.edu](mailto:ckrivers@ucanr.edu).

### **Reducing Attractants**

There are several tools to reduce predator presence including; placement of barriers like fences or fladry (hanging flags), hazing with motion sensor lights in specific areas, livestock protection animals like donkeys or dogs, human presence and reducing attractants. Attractants are considered to be anything that has potential to attract predators. This includes easy prey such as old, sick, wounded and deceased animals. The goal of reducing attractants is to minimize the available food supply for predators. Remove animals considered to be attractants from the main herd and dispose of carcasses. For information on proper disposal visit [https://www.cdffa.ca.gov/ahfss/Animal\\_Health/Animal\\_Disposal\\_Guidelines.html](https://www.cdffa.ca.gov/ahfss/Animal_Health/Animal_Disposal_Guidelines.html). For local disposal please contact Six Shooter Tallow Transport's Pistol Bray at 530-340-2844.

### **Suspected Wolf Kill?**

Report all suspected livestock, guard animals, herd dogs and other domestic animal kills immediately to (530) 225-2300 or [californiawolfsightings@wildlife.ca.gov](mailto:californiawolfsightings@wildlife.ca.gov) to have an investigation

### **Steps to Take to Preserve Evidence**

- Avoid walking in and around the area.
- Keep dogs and other animals away to avoid disturbance
- Place a tarp or other cover over the carcass.
- If possible, use cans or other objects to cover tracks and scats that can confirm the depredating species.
- When possible keep a presence in the area to deter predators from consuming the remainder of the carcass.

For more information you can visit

<https://www.wildlife.ca.gov/conservation/mammals/gray-wolf>

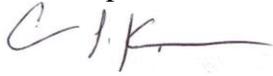


**We want to hear from you!**

- Do you prefer a hard copy or an electronic version of the quarterly Siskiyou Stockman?
- Have a topic idea for the July Newsletter? Let us Know!

Sincerely,

Carissa Koopmann Rivers



Livestock and Natural Resources Advisor  
Siskiyou County



**SISKIYOU STOCKMAN**  
*Livestock & Rangeland News*



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