



Modoc Ranch Roundup

C O O P E R A T I V E E X T E N S I O N

Beef Bits- Banding for Castration

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Banding involves placing a heavy rubber band around the scrotum but above the testicles. The rubber band shuts off the blood supply to the scrotum and testicles, causing the testicles to degrade and slough off after several weeks. This technique should be used on smaller calves, less than 250 lbs. The rubber band cannot shut off the blood supply to the spermatic cord in older, larger animals.

Castrating in this method requires a special tool called an elastrator and specially designed rubber bands. Bands should be stored in a refrigerator or other cool place to maintain strength and elasticity. New bands should be purchased each year to reduce the incidence of failure.

Animals should be castrated restrained on their sides. The band should go completely over both testicles. Check to make sure that the band is above the testicles and both

testicles are in the lower part of the scrotum. If part of the testicle is above the band, squeeze the handles of the elastrator and reposition the band before removing the tool. Failure to correct this situation allows a calf to develop male sexual characteristics and to produce enough sperm to breed a female. After the band is properly placed, push it off the points of the elastrator while pulling the tool away from the body. Two bands may be used to reduce failure rates.

This method of castration has a higher incidence of tetanus than most other methods and especially when done on older animals, because the blood supply is cut off and the tissue becomes infected. Tetanus-causing bacteria prefer to grow in anaerobic (without air) conditions created by the band. Make sure animals have tetanus vaccine before implementing this method.

F A R M I N G F A C T S - L I M I T E D W A T E R I D E A S

This information is from the Tulelake Farm Advisor Update and was written by Rob Wilson, Tulelake Farm Advisor; Steve Orloff, Siskiyou Farm Advisor; Brian Charlton, OSU-KBREC Assistant Professor; and Rich Roseberg, OSU-KBREC Associate Professor

Given the uncertainty of water deliveries in 2010, here

are some strategies to consider for optimizing profits with limited water supplies. Information contained in this article will address frequently asked questions and potential circumstances you may face this year. Monitoring crop water use and soil moisture is always important; however, it is even more critical during years of limited water deliveries. Knowing the status of available soil moisture is critical to make proper decisions on

SCHEDULE OF EVENTS

- April 29th- California Regional Water Quality Control Board Meeting- Ukiah Valley Conference Center, Ukiah, CA
 - May 4th- 7th- ASI Spring Legislative Trip, Washington DC
 - May 7th- California Rangeland Coalition Field Trip to Deer Valley Ranch- Monterey County
 - May 20th- 21st- Modoc Washoe Experimental Stewardship Meeting, Cedarville Community Church, Cedarville
 - May 31st- Memorial Day, Farm Advisor's Office Closed
 - June 5th- MCCA Field Day (see below)
 - June 16-17th CCA/CCW Midyear Meeting, Folsom
 - June 18th-20th- CBCIA Tour Sierra Valley
- Save the Date
- July 16th-17th- CWGA Annual Meeting, Palace Hotel, San Fransico, CA
 - August 29th- Tri- County Field Day Alturas, CA

G E O T H E R M A L W A T E R

Keep in mind, anyone with geothermal water in the 100 degree Fahrenheit range can consider space heating. Radian floor material can cost as low as \$5 per square foot and 10 gallons per minute can heat 2000 square feet. A typical 3/4 horse-power submersible pump would use about 400 kilowatt hours per month. With a electrical rate of \$0.07 per kilowatt hour the system would cost \$28 per month in electricity.

Funding sources are limited at this time, however, there is no harm in having a plan. Stop by the NRCS office for more information.



M O D O C C O U N T Y C A T T L E - M E N ' S S P R I N G F I E L D D A Y

Come join MCCA to celebrate the Hagge Ranch's 75th Anniversary on Saturday June 5th.

***9:00 AM-
Ranch Tour***

***1:00 PM-
Lunch***

***Lunch is \$5
per person!***



FARMING FACTS – LIMITED WATER IDEAS

fertilizer inputs, harvest strategies, and pest-management. If you're fortunate enough to have well water this year, monitoring crop water use can help you spread limited water supplies efficiently across all your fields. You don't want to over-apply water or irrigate too frequently when your crops don't need water and you don't want to under-apply water when your crops need water most.

Over-irrigating can exacerbate nutrient leaching and provides an ideal environment for fungal diseases. Likewise, moisture stress often leads to an increase in pest problems. Many growers may be tempted to skip pest control treatments this year in an effort to lower input costs. Unless yield is so low you don't plan to harvest the crop, this is usually a mistake that will result in yield and quality losses that exceed the cost of the treatment. In alfalfa, weeds consume spring soil moisture quickly—moisture that would otherwise be available for the first cutting of alfalfa. Weeds also decrease hay quality and produce seeds that will persist for the rest of the stand's life. In wheat and barley, studies have stated weeds can decrease dryland grain yields by 25% to 50%. Insect pests can also be worse in a moisture stressed field, so regularly monitoring pest populations and treating according to established economic thresholds is recommended.

SMALL GRAINS

- ♦ Wheat and barley varieties differ significantly in their yield potential under limited moisture conditions, thus it is good idea to check with your local seed supplier for variety performance under deficit irrigation or dryland conditions. Typically, early maturing varieties will yield more than late maturing varieties when grown under limited soil moisture.
- ♦ Consider reducing your seeding rate by 25% if you cannot irrigate. In University trials conducted in the Central Valley of California, wheat and barley grown in drought years produced similar yields when seeded at rates between 90 and 150 lbs/ acre.
- ♦ Consider harvesting small grains for hay if soil moisture is not adequate for grain fill. Planting a dual purpose variety provides more flexibility for deciding whether to harvest for hay or grain later in the season when crop status and irrigation availability are better known. If soil moisture is not adequate through grain development, grain yield and quality decrease rapidly. Moisture stress prior to the soft dough stage will result in small, shriveled kernels. Harvesting grain forage at the soft dough stage typically maximizes hay yields.
Note: Drought stressed grain hay crops may have high nitrate levels. Oats are especially sensitive. Grain hay crops should be tested for nitrate levels prior to feeding to livestock.
- ♦ Apply nitrogen in split-applications. Apply some nitrogen at planting and then top-dress additional nitrogen as needed later in the growing season. If the soil has residual nitrogen from the preceding crop, nitrogen applied at planting is probably not needed. If water is short, you may only need the nitrogen applied at planting. If it's a wet spring, you can always top-dress additional nitrogen on the field to increase yield potential.

ALFALFA

- ♦ Focus on maximizing first-cutting yield if irrigation is limited. Residual soil moisture, potential spring rainfall, and mild spring temperatures often result in respectable first-cutting yield in the Klamath Basin under dryland conditions. First cutting typically has the highest yield and better quality compared to mid-summer hay so focusing limited water resources on this cutting makes the most sense. Alfalfa will go into a 'drought-induced' dormancy if the soil is dry after first cutting. This dormancy state helps prevent plant death; however, alfalfa is very slow to re-grow from dormancy if water is applied to the field later in the season. In most cases, drought-stressed alfalfa will remain dormant until fall and produce little forage during the summer.
- ♦ Regularly scout for alfalfa weevil and cowpea aphid this year. In dry years, insect pests are of-

FARMING FACTS – LIMITED WATER IDEAS (CONT FROM PG. 3)

ten problematic, and it's best to be proactive when treatment is needed.

VEGETABLE CROPS

- ◆ Vegetable producers have few choices in a dry year except to limit production acres to fields with full-season irrigation. Potatoes and onions are very sensitive to drought-stress, and yield and quality plummet with inadequate irrigation.

COVER CROPS

- ◆ Cover crops can help reduce soil erosion, suppress weeds, and enhance soil health, but they require adequate soil moisture at planting. Cover crops also require production costs that should be taken into consideration such as seed, tillage and planting costs. If you plan to grow a cover crop without irrigation, it's best to plant a cool-season

variety in fall or early spring to take advantage of spring precipitation and cooler temperatures. Dryland cover crops that have performed well in University trials include mustards, small grains, field peas, and vetches. (Call Farm Advisor Office for more information on species and varieties.)

- ◆ If water becomes available in mid-summer, plant a summer annual such as sudan grass or teff that grows quickly in the mid-summer heat.
- ◆ A cheap option to consider is to let weeds serve as the cover crop. Letting winter annual weeds grow until they are 6 to 12 inches tall and then spraying them with a herbicide can help prevent soil erosion. This approach also depletes shallow soil moisture which can prevent summer weed growth. It is IMPORTANT to kill the weeds before they flower and produce viable seed. Otherwise, this is not a recommended practice.

HORSE HINTS – DRY LOTS

Using a dry lot is one of the best management tools to maintain pasture condition. A dry lot, sometimes called a paddock, is a small enclosure, such as a corral, pen, or run, that serves as the horse's outdoor living quarters when they should not or cannot be on the pasture. This area holds horses and prevents overgrazing of the pasture when grass is in short supply, prevents damage to the pasture when it is too wet or too dry, and allows owners to control the amount of grass horses consume on a daily basis. A dry lot is also useful for separating or confining animals.

Options for dry lots

A dry lot without additional footing material is often referred to as a "sacrifice area." These lots usually are small areas that are sacrificed to benefit the remainder of the pasture. Sacrifice areas

get "beat up" and become dusty or muddy, depending on the season, but they protect the rest of the property from the same fate. This approach is very low cost. A dry lot can be more than a confinement area for horses when they are not on pasture. These areas can be designed for multiple use and might include, for example, a run from a horse stall, a small outdoor arena, or a round pen for working or lunging.

The dry lot should be sized to fit your farm and the number, size, and personalities of the horses to be confined. It should offer no

less than 256 square feet (the equivalent of a 16 x 16 foot stall) per horse. A dry lot of this size does not provide space for exercise,

however, and many horse owners prefer a much larger area.

JUST A REMINDER: RIPARIAN CORRIDORS ARE IMPORTANT FOR A HEALTHY ECOSYSTEM

Stream channels are conduits to transport snow melt, and high energy rain fall events from points of higher elevations to points of lower elevation. Throughout this process a lot of benefits to the resource base occur. Examples are, ground water recharge, sustained flows throughout the year, meadows get irrigated, riparian corridors produce vegetation to cool runoff water, fish and wildlife habitat are produced, and water can be diverted to irrigate our crops at lower elevations in the watershed. If we neglect our stream channels one, or more of these important functions can be disrupted and maybe permanently damaged beyond repair.

We should be extra cautious how we utilize our streams and the vegetated areas adjacent to and inside the stream channel in drought years. Healthy vegetated meadow systems and the riparian vegetation in the stream channel are the glue that holds our stream channels together. Without healthy vegetation, runoff velocities increase, vegetation and organic matter get washed away, stream channels down cut and drain the meadow system, production of a complex vegetative composition becomes one of single plant species like juniper, sagebrush, or worse, noxious weeds. Channel banks slough off into the stream, and make the stream channel alter its' course prematurely causing accelerated erosion, deposition, flooding, loss of property, degradation of fish habitat and wildlife habitat. Also the cost to the local economy could be devastating from the loss of production, cost of cleanup, and environmental regulations.

The following pictures depict what happened to a small watershed in the Upper Pit River when stream channel health got away..



Meadow system at the top of the watershed. Notice vegetative root structure is beginning to weaken and hold soil in place. Down cutting is migrating upstream into springs.



Just below the headwaters, stream flow velocities have increased enough to down cut through the adjacent meadow system. The meadow is no longer rehydrated as water passes through. Vegetation has been altered, medusa head and cheatgrass have invaded.



The channel continues to get deeper and further affect ground water hydrology and natural irrigation as the stream channel continues downstream in the watershed. Note the attempt to artificially stabilize the channel mid-picture. This attempt did not work with out the help of healthy vegetation.



Note velocities are severe enough to transport gravels. Channel banks are so steep now that vegetation is having trouble establishing in the channel banks. Sage brush has replaced grasses and forbs on the old flood plain. Channel has no chance of ever spreading out on the flood plain without expensive measures to heal the channel. (Cont pg 4)

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COOPERATIVE EXTENSION

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Missy Merrill-Davies: County Director and
Livestock and Natural Resources Advisor

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STREAMBANK HEALTH CONT.



This system now offers no protection from extreme sediment transport to other systems downstream. Water quality is in severe threat from suspended sediment, and extreme water temperatures. Surrounding meadow system is destroyed, and economic productivity to the local economy eliminated.

To learn more how we can protect the stream channels in our watersheds contact your local Natural Resources Conservation Service Office located in the Modoc National Forest Supervisor's Office at 804 West 12th Street, Alturas CA. Phone 530-233-4137.