



## Ranch Roundup

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

### Backyard Composting

Why Compost? You can provide your own soil conditioners while reducing garbage waste and need for store bought additives. Compost improves the water holding capacity of soil, decreasing water needs. It keeps clay soils from compacting and gives sandy soils more structure.

How do you begin? Choose a system— bins, drums or open piles. The optimal bin size is 3'X3'X3' to 5'X5'X5'. Bins will require air holes but do not make larger than 1/2". Chop materials— they will break down faster. Mix "BROWNS" with "GREENS". Maintain air and water balance by keeping compost as moist as a wrung-out sponge.

What do I put in? Brown materials— dry leaves, eggshells, straw, coffee filters, lint, wood shavings, pine needles, shredded newspapers, and chopped woody prunings. Also include green materials— grass clippings, herbivore manures, flowers, green leaves, young weeds, vegetable and fruit peels and sod. Do not put in— meat bones, fish, dairy products or grease, dog, cat or bird feces, invasive weeds or plants, diseased plants.

When do I use or work it? Turn the pile after 3 days at first and then weekly. Add water as needed. Material can be harvested after 3 to 12 months. Sift out coarse or unfinished materials and return.

#### Troubleshooting-

SYMPTOMS	PROBLEMS	SOLUTIONS
Pile not composting	Too dry or wet Too much brown	Add water until slightly damp; turn if too wet Add fresh matter or organic fertilizer; turn
Pile smells rotten	Too wet or too many food	Turn and add browns
Attracts flies	Food scraps exposed Non-compostables	Bury and mix food scraps 6-12" into heart of pile Remove meat, dairy, grease etc. and turn pile
Rodents in Pile	Food scraps exposed,	Use traps or baits; rodent proof bin, bury food, turn pile, remove meat grease etc.

### L A T E S U M M E R A L F A L F A S E E D I N G

There are several advantages to late-summer planting of alfalfa, the greatest advantage is that by next summer you can have a fully established alfalfa stand with a good first season yield. Furthermore, as the days get shorter, much of the new seedling's energy is dedicated to root development for a deeper, stronger, root system. Lastly, late-summer seeding allows planting directly into the stubble of a previous cereal crop without additional tillage.

**RISKS.** If you plant too late, mid September or later in Modoc County, the new seedling stand may not be mature enough to withstand killing frosts in October or harsh winter conditions that cause soil heaving.

**FERTILITY.** Adequate soil fertility is fundamental to stand establishment. Most soils in Modoc County are sulfur deficient and may also require additional phosphorus applications. Pre-

planting incorporation of sulfur and phosphorus materials is highly recommended. Consult with your fertilizer supplier or Farm Advisor to get the best recommendations for your specific field's needs.

**IRRIGATION.** Proper irrigation of a new seeding is essential to achieving a dense healthy stand. A general rule of thumb is to apply approximately one inch of water per irrigation, (a 3-4 hour set for most wheel line systems) and to re-apply water every 4 to 5 days until late fall. As the days get shorter and the evapotranspiration rates decrease, be careful not to over irrigate.

**WEED CONTROL.** Weeds compete with alfalfa for light, water, and nutrients. Controlling weeds in the seedling year can get the stand off to a fast, healthy start, and reduce weed pressure in subsequent years.

## RESEARCH UPDATE

### EARLY VS. LATE SEASON GRAZING ON WATERFOWL HABITAT

Recent research by myself and Dr. Dan Marcum, UCCE Farm Advisor covering Shasta and Lassen counties has been focused on the effects of early versus late season grazing on waterfowl habitat.

Typical grazing for waterfowl habitat is during late summer. This is thought to avoid disturbances of nesting birds and ensure adequate forage for nesting habitat. However, by late summer the forage has lost much of its quality for livestock consumption compared to late spring or early summer.

Cattle were grazed in May to June or September–October in 200 acre pastures. Animals were stocked at 0.5 AUM per acre or 200 head were in for 2 months. After animal removal forage was clipped and weighed to give an estimate of how much residual forage was available for wildlife use throughout the winter and the following spring.

Preliminary data has shown an increase in the standing forage after the growing season in the early grazed pasture compared to late grazing in both years. The difference between early grazed and late grazed was more than 710 lbs per acre in 2010 and 450 lbs per acre in 2011.

This is similar to other information provided where moderate, early defoliation of plants results in regrowth similar to plants which were ungrazed. In general, plants in this area have produced seed and gone dormant by September, thus no regrowth was present in areas of late season grazing.

Cow body condition scores were similar between early and late season grazed pastures. Early season forage is of higher quality but in lower quantity. While late season forage is of higher quantity, quality is reduced. The lack of differences between scores could be attributed to the abundance of forage in late season and the reduced calorie needs because of dwindling lactation.

Unfortunately, were unable to do spring nest counts in the grazed areas. This is the next piece to the puzzle to determine how season of grazing effects waterfowl habitat and how much the birds use the early or late grazed areas compared to those not grazed at all.

However, we were able to determine early grazing may positively effect the quality of habitat through increasing standing forage.

### PHOTO MONITORING CAMERAS

Another project which has shown success is the Photo monitoring project, funded by USFS RAC and Modoc County Cattlemen's Association monies.

The Farm Advisor's office was able to purchase 15 GPS-enable cameras for check-out. These cameras are fairly simple to use and have been used to collect range health data on both public and private lands.

The cameras can be set to automatically record the GPS points of where a picture was taken along with the date and time. This reduces the need to carry cards to determine where the picture was taken. It increases the ability of land owners and managers to effectively store and organize pictures for future use.

There is still six cameras available for checkout. If you are interested, contact the office.

### MEDUSAHEAD PROJECTS

There is currently three different projects going on in the county to establish economic ways to combat medusahead invasions. All these projects are in there infancy and will hopeful result in more tools to fight this issue.

One project uses early season livestock grazing to reduce perennial grass competition with medusahead and hoof action to reduce thatch and incorporate desirable broadcast seed into the soil.

During our last check on the sites, the Medusahead had been utilized at up to 70% with less than 30% utilization on perennial grasses and negligible use of sagebrush.

While, we are still waiting on the results of our seedings. The area did show an increase in the native forb populations compared to areas excluded from grazing. These native forbs are an essential component in sage grouse and sheep diets.

I hope to have the data and analyses for the next issue.

The other two projects are statewide with sites here in Modoc. The charge is being led by two other UCCE Farm Advisors— Josh Davy and Theresa Becchetti. I will keep you abreast of what we find out in future issues.

## *Gathering information to treat the sick animal*

### *The Phone Call: “Doc, she ain’t doing right”.*

*John Maas, DVM, MS, DACVN, DACVIM*  
*Extension Veterinarian*  
*School of Veterinary Medicine*  
*University of California, Davis*

Most cattle veterinarians get this phone call from clients often, in some cases daily. The message is—my cow (calf, weaner, bull) is sick, what’s wrong and what should I treat her with? I know, Will Rogers said it many years ago, “Personally, I have always felt that the best doctor in the world is the Veterinarian. He can’t ask his patients what is the matter...he’s just got to know.” Well there is some truth in that, but times have changed and making a correct diagnosis over the phone creates an additional hurdle. By the way, where is Will Rogers when the nation needs him? This is a question for another day, perhaps.

With the relative shortage of cattle veterinarians, this topic deserves some space in the column this month. Let’s discuss some of the information a rancher can gather to help their cattle and their veterinarian. Good decisions are made based on good information and the best decisions are based on the best information. What do you need to tell your veterinarian besides, “She ain’t doing right.”?

In medicine we usually start with what we refer to as the *signalment*—this is the animal’s **age**, **sex**, and **breed** and usually includes some type of ID. So as an example you may call about a 7 year old, Angus cow (supposed to be 5 months pregnant), and ear tag number 524. That’s the basic information or signalment. Then other helpful information will be added to this foundation.

When I examine a cow I do what is called a physical exam—this term stems from the fact I use my physical senses—sight, touch, hearing, and smell to examine the animal. As an experienced cattle producer you do the same, often without knowing it—it’s just common sense. The basis of the physical examination is temperature, pulse, and respiratory rate (often referred to as TPR).

Therefore, you will need some very basic equipment and some training from your veterinarian. The equipment you will need is a large animal thermometer and a workable stethoscope. You can obtain both from your veterinarian and he or she can give you good advice on how to use and care for these items. If you use an “old-fashioned” rectal thermometer with mercury, I recommend you tie a 6-8 inch piece of string through the hole at the end of the thermometer and to an alligator clip such as those used in electrical testing. You can drill the end of the plastic case for the thermometer so the string will pass through. This allows you to put the thermometer back into the plastic case once you are done and have cleaned the thermometer. The thermometer is placed in the rectum of the animal and the alligator clip is attached firmly to the tail head hairs so when the animal defecates the thermometer will not end up in the bottom of the chute under 3 pounds of fresh feces, but will be hanging from the tail head and can be re-inserted. The normal rectal temperature for cattle and calves is listed in Table 1. Alternatively, there are electronic thermometers available; however, they tend to be more expensive, have greater maintenance requirements,

and often “disappear”. No matter which type you use, clean it with water and soap or disinfectant when you finish before you store it.

The second piece of equipment is a stethoscope. Be sure to work with your veterinarian to pick out the one that will work for you—one that is well made, reasonably priced, and durable are the main criteria. The stethoscope can be used to (1) listen to the heart and determine the pulse rate (beats per minute), (2) listen to the lungs for abnormal sounds and determine the respiratory rate (breaths per minute), and (3) listen to the rumen to determine if the animal is ruminating normally. The normal pulse for cattle and calves is listed in Table 2 and the normal respiratory rate is in Table 3. Cattle over 5-6 months of age are usually ruminating actively and by placing the stethoscope high in the left flank (behind the ribs and below the bones of the spine there is a triangle without bones called the paralumbar fossa) and listening quietly you should be able to hear 1-2 strong rumen contraction per minute. For all uses of the stethoscope get some training from your veterinarian—you should count on an hour or two at a minimum to examine several animals to get the hang of the technique and to understand what “normal” sounds like.

Other observations you should make as a routine are (1) any nasal discharge—clear, cloudy, white, thick, blood-tinged, (2) any signs of abnormal appearance of the nose, eyes, or mouth, (3) mucous membrane color (inside of mouth, white part of the eye, or inside of the vulva)—here you are looking for a normal light pink coloration—abnormal findings are white (pale, anemic) or yellow (jaundice), (4) character of the feces—diarrhea, constipation (fecal balls like horses), any mucous or blood mixed with feces, (5) any signs of lameness, weakness, or inability to walk normally, (6) any abnormal odor(s) to the animal, and (7) the color of the urine. In black cattle the color of the mucous membranes can be difficult to assess as their mouths and around their eyes is often black and in these cases the inside of the vulva is a good place to observe for the normal pink color.

With these simple tools, some training, and a good working relationship with your veterinarian you are now ready to make a phone call that will help your animal, your veterinarian, and your bottom line. Now that phone call may sound more like this, “Doc, I have a 4 year old, black white faced cow (#847) with a 104°F temperature, pulse of 85/minute, respiratory rate of 42/minute, lungs sound clear but harsh and there is a bad smell coming from her rear end. Also, she appears to have some diarrhea with a little bright blood in it and she seems to be straining a little.” Now this is real information can that help everyone make an informed decision.

This column is not meant to be a “Do It Yourself Guide”, but is meant to stimulate producers to consult with their veterinarians, get some additional training (and a little equipment), and learn to gather some information on their animals when they become ill and need your help. The most important message is to get some advanced training from your veterinarian so your conversations can go beyond, “Doc, she ain’t doing right.” It’s like Casey Stengel once said, “It’s amazing what you can observe by just watching.”

Cont. on pg 4.

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Modoc County UCCE  
202 West 4th Street  
Alturas, CA 96101

Missy Merrill-Davies: Livestock and Natural  
Resources Advisor

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**GATHERING INFORMATION TO  
TREAT A SICK COW CONT.**

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Table 1. Normal Rectal Temperature in Cattle

Age	Degrees Fahrenheit
Adult	100.5—102.5
Calves	101.5—103

Table 2. Normal Pulse Rate (Heart Rate) in Cattle

Age	Resting HR beats/minute
Adult	40—80
Calves (<30 days of age)	100—140

Table 3. Normal Respiratory Rate in Cattle

Age	Resting Breaths/minute
Adult	12—36
Calves	30—60