

# Modoc Ranch Roundup

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

## Horse Hints- Chiropractic Care: What? When? How?

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**WHAT?-** Equine chiropractic care can be beneficial to a horse much in the same way as it is to a human. Correct alignment of the skeletal system allows for proper movement throughout the body and aids in muscle and nervous system performance. Chiropractic adjustments have been proven to alleviate pain in the back and neck, treat gait abnormalities, and have some success in minimizing pressure on the sciatic nerve. However, the use of a chiropractor should not replace routine veterinary care.

**WHEN?-** There are several, common situations in which your horse may benefit from chiropractic care a few of those are: ill-fitting tack, improper shoeing, trauma, falling, or even everyday activities such as training and riding. The most common symptom associated with improper spinal alignment is pain which may show itself in changes of posture and gait. These changes can cause stress on other joints and muscles. Other symptoms to be aware of are: stiffness, short striding, lack of impulsion or power, Cont. pg 3.

## B E E F B I T S – C U R L Y C A L F S Y N D R O M E

A new genetic disorder, dubbed “curly calf syndrome”, has been identified in certain Angus cattle lines and Angus crossbred populations. For those unfamiliar with this condition, it is a recessive lethal defect, meaning that a calf has to inherit the genetic defect from both of its parents to be affected. These “curly calves” are still-born and show symptoms which include a bent or twisted spine, small size and thin appearance, and rigid legs which may be hyper-extended. Animals which are carriers of this defect, meaning they only have one copy of the chromosome with the deletion, appear normal but may have affected calves if bred to another carrier animal. It is important to note that some of these “curly calf” symptoms can be seen in genetically-normal calves that have been exposed to viruses and other environmental factors. Four commercial DNA-testing companies are now offering a

DNA test for this disorder.

**Figure 1.** Appearance of a calf with Arthrogyposis Multiplex (“curly calf”). Photo used with permission from <http://www.angus.org>. Dr. Jonathan Beever from the University of Illi-



**SCHEDULE OF EVENTS**

- March 3rd– Potato Seminar, Tulelake Fairgrounds, Tulelake, CA
- March 7th– Contracts due for Surprise Valley Wool Pool
- March 24th– California Ag Day at the Capitol, Sacramento, CA
- March 27th– Cesar Chavez Day Office Closed
- March 27-29– California Cattlewomen’s Mid-Year Meeting Folsom, CA
- April 23rd– Modoc County Cattlewomen’s Meeting, Golden’s in Cedarville
- April 30th– May 3rd– Beef Improvement Federation, Sacramento, CA see insert

**BEEF BITS – CURLY CALF SYNDROME CONT.**

<b>DNA testing company</b>	<b>Website</b>	<b>Cost of AM test</b>	<b>Preferred tissue type</b>
<b>Agrigenomics</b>	www.agrigenomicsinc.com	\$25	Whole blood Semen
<b>Igenity</b>	www.igenity.com	\$26	Whole blood Semen
<b>MMI genomics</b>	www.metamorphixinc.com	\$24 (1-19 samples) \$22 (20-99 samples) \$20 (100 + samples)	Semen Blood on FTA cards
<b>Pfizer Animal Genetics</b>	www.pfizeranimalgenetics.com	\$29* <small>(*each test earns \$10 credit towards GeneSTAR testing through 6/1/09)</small>	Whole blood Semen Blood on FTA cards Hair sample (> 25 hairs)

**Table 1.** Commercial DNA-testing companies offering an Arthrogyposis Multiplex (“curly calf”) test.

nois and Dr. David Steffen from the University of Nebraska, in collaboration with the American Angus Association, have been investigating curly calf syndrome since September 8, 2008. It appears that the original genetic defect or chromosomal deletion occurred in the maternal grandsire of the widely-used GAR Precision 1680 (AA Registration No. 11520398), and that bull was **Rito 9J9 of B156 7T26**, (AA Registration No. 9682589). Therefore, animals with Rito 9J9 of B156 7T26 in their pedigree would be prime candidates for genetic testing.

A listing of the curly calf syndrom carrier-status of 736 prominent Angus AI sires is available at [http://www.angus.org/NAAB\\_release.pdf](http://www.angus.org/NAAB_release.pdf).

## FORAGE and FIELD CROP FERTILITY MANAGEMENT

With spring rapidly approaching, now is a good time to evaluate options for crop fertility management for the 2009 growing season.

### CEREAL HAY and GRAIN CROPS

Because of our short growing season, it is best to apply all the fertilizer needs of cereal hay and grain crops early in the spring. Make an appointment with your fertilizer dealer to have them take soil samples now so you can determine if you have any nutrient deficiencies that need to be corrected for optimum crop production.

Nitrogen is the most limiting nutrient for cereal crop production in Modoc County.

Factors such as previous crop, seeding rate, and available irrigation water should be considered in determining how much nitrogen to apply. We typically see improved yields with the application of between 60 to 120 pounds of nitrogen per acre for most cereal crops. If sulfur is limiting, use ammonium sulfate to supply both nitrogen and sulfur. If phosphorus is limiting, incorporate a mono-ammonium-phosphate material like 11-52 at planting.

### GRASS HAY CROPS

As with cereal crops, nitrogen is the most limiting nutrient for orchard grass and tall fescue hay crops.

Adequate season long irrigation is critical for maximizing yield and fertilizer use efficiency.

Cooperative Extension studies in Modoc, Lassen and Siskiyou counties have documented that significant yield increases can be attained by fertilizing with nitrogen when sulfur and phosphorous levels are adequate.

Typical yields with no nitrogen applied fall into the 2 tons of hay per acre range. With optimum nitrogen fertilization, we have documented yields in the 5 to 6 tons per acre range. With two or three cuttings per season systems it is best to use a split application approach with the largest amount applied at green-up in March or April and second or third applications after the hay is removed following 1<sup>st</sup> and 2<sup>nd</sup> cuttings. The best yields occurred with the application of 125 lbs of N/acre at green-up followed by 80lbs of N/acre after 1<sup>st</sup> cutting and 40 lbs of N/acre after second cutting.

In two cut systems followed by aftermath grazing, the optimum yields occur with 100 lbs of N/acre at green-up followed with an additional 100 lbs of N/acre after first cutting.

Call Don Lancaster at the Modoc County Farm Advisor's office if you have any questions.

### ***Horse Hints- Cont.***

loss of performance, difficulty in obtaining and maintaining collection. Additionally, behavioral changes may be indicative of problems including: poor attitude, refusals, irritability cinchy or cold-backed, and bucking.

**HOW?-** Contact your local veterinarian for information on certified equine chiropractor and to determine the effectiveness of such treatments. Chiropractic provides expertise in the evaluation of back and joint problems that can provide the veterinarian with additional means of diagnosis and early treatment options in certain lameness problems; especially conservative treatment of biomechanically-related musculoskeletal disorders and should be considered.

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**COOPERATIVE  
EXTENSION**

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**E A R L Y C R O P M O I S T U R E**

Tom Hill  
NRCS  
Soil Conservationist

Typically March 25<sup>th</sup> is when rapid plant growth and measurable soil water use begins in our area. The term used to describe this is break dormancy. It is a good idea to determine the level of soil moisture in your crop's root zone before break dormancy. Sampling several locations in a field with a soil auger and using the feel method is an excellent way to determine soil moisture level. The feel method involves squeezing augered soil samples in your hand and determining estimated soil moisture qualitatively.

If your root zone soil is not full of water, an irrigation should be scheduled at break dormancy or soon after. Optimum plant growth is assured by avoiding water stress. This is especially true at the beginning of the season as plant stress tends to be additive and forage plants grow more efficiently during their first crop cycle.

For more information, stop by at our office Natural Resource Conservation Service at 804 W. 12<sup>th</sup> St. Alturas or call 530-233-4137.