

However, potential dangers exist if animals are fed at extreme rates due to fat and sulfur content, he says. Excessive fat can reduce forage digestibility. Also, sulfur can tie up minerals such as copper, creating a deficiency. Excessive sulfur may cause polioencephalomalacia, also known as brainers.

Producers who use distiller's grains need to be cognizant of all sulfur sources, including water, MacDonald cautions. If a producer is feeding distiller's grains high in sulfur and also have sulfur in their water, it could be enough to cause trouble.

Despite that he concludes, "I'm very much enthused about using distiller's grains to produce more beef on a fixed-land base."

BVD PREVALENCE STUDY PROVIDES INSIGHT

By Dave Sparks, DVM, Oklahoma State University

Researchers at Oklahoma State University College of Veterinary Medicine have recently completed a study designed to determine how common BVD Persistent Infected (PI) individuals are in Oklahoma cow herds. The study involved testing all of the 2006 calf crops from 30 herds in Southern Oklahoma with the ear notch test. Herds included in the study ranged in size from 14 cows to over 500 cows. The study showed that 16.7% of the ranches had at least one PI calf in the 2006 calf crop with some ranches having as many as 10 or 12.

PI calves result when a pregnant, susceptible cow is exposed to the BVD virus between 40 and 125 days of gestation. If she is exposed before that time she will return to heat, and after that time she will either abort or have a weak calf. During the 40 to 125 day range, however, the fetus is inventorying his tissues for the development of the immune system and he categorizes the virus as self tissue. Because of this, he will never be able to respond immunologically to the virus, and when born becomes a super shedder of the virus.

Normal calves that become infected usually get sick and can shed from 1 thousand to 10 thousand virus particles per day in the nasal secretions. PI calves, may appear perfectly normal, but they will be shedding from 1 million to 10 million virus particles per day for their entire life.


Vaccination will probably protect animals from exposure by acute carriers, but the virus shedding capabilities of the PI calves can overcome even the best vaccination program. For this reason, vaccination alone cannot control BVD if you have PI individuals in the herd. The solution also involves testing to recognize PI individuals and removing them from the herd. Estimates are that BVD losses cost cow/calf producers in Oklahoma from \$50 to \$70 per cow per year. Testing for PI's is inexpensive, quick, and samples can be taken by the rancher as he works his calves.

Signs of BVD problems that cow operators may see in their herds include cows that are slow to breed or high percentage of open cows, abortions, congenital defects (especially involving the brain or eyes), weak calves at birth, and calves that die before weaning with no apparent cause. BVD is an insipient disease and rather than dramatic losses you usually see a few losses from all or most of the above concerns.

By causing reproductive problems in cows and respiratory disease in growing and finishing cattle, BVD is one of the most devastating and costly problems in cattle production. Recent research is now helping us to understand why we have had so much trouble getting a good handle on this problem. If you are having trouble weaning as many calves as you think you should, you might want to consider testing your calves. Your local veterinarian can help you further understand the problem and assist in setting up a testing program that is right for you.

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AG NEWS

Division of Agricultural Sciences & Natural Resources
Oklahoma State University

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COW-CALF CONFERENCE IV

Thursday, April 5, 2007
At The Beaver River Stockyards
Beaver, OK

5:00 pm Where do Distillers By-Products Fit for the Cow-Calf Producer?

Dr. Britt Hicks, OSU Area Livestock Spec.

6:00 pm Registration, Chili Feed

Please call the Extension Office at (580)625-3464 by Monday, April 2nd

6:30 pm How do Weaning Strategies Impact Calf Value?

Dr. Ted McCollum, Texas A & M Beef Cattle Spec.

7:15 pm Influence of Feed Grain Prices on the Price of Calves

Dr. Derrell Peel, OSU Livestock Marketing Spec.

TIME FOR PEACH LEAF CURL CONTROL

If you have ever seen emerging peach leaves that are puckered, swollen, distorted and a reddish-green color, you have seen peach leaf curl. Uncontrolled, this disease can severely weaken trees because of untimely leaf drop when the leaves unfurl in the spring. Fortunately, peach leaf curl is not that difficult to control if the spray is applied early enough. By the time you see symptoms, it is much too late. As a matter of fact, fungicides are ineffective if applied after the buds begin to swell. The recent cold temperatures should keep our trees in tight bud long enough to find a window for application. Don't spray when temperatures will fall below freezing before the spray dries.

Peach leaf curl can be controlled by a single fungicide application either in the fall after leaf drop or in the spring before bud swell. There are several fungicides labeled for this disease including Bordeaux, liquid lime sulfur, and chlorothalonil (Ortho Garden Disease Control, Gordon's Multipurpose Fungicide, and Daconil). Thoroughly cover the entire tree during application. Note that it is much easier to achieve good spray coverage if the tree is pruned before spraying.

March 2007

IFMAPS PROGRAM

No-till farming, also known as conservation tillage or zero tillage, is a method of growing crops without disturbing the soil through tillage. This method of farming can reduce the cost of inputs such as fuel, labor, and fertilizer for crop production. Producers interested in converting to no-till production should familiarize themselves with proper management techniques involved in no-till farming. While yield may be less than conventional tillage, the reduction of input costs increases profit potential. In addition, no-till farming conserves soil moisture which is a critical factor in determining crop success. Producers in Oklahoma interested in analyzing the potential financial impact of adopting new production methods should contact their local Oklahoma Cooperative Extension Service (OCES) office and ask about the IFMAPS program.

Intensive Financial Management and Planning Support (IFMAPS) is a program to assist Oklahoma farmers and ranchers in evaluating financial plans and analyzing their financial situations. OCES offers this program as a free and confidential service to Oklahoma farmers and ranchers. Producers can call toll free **1-800-522-3755** to schedule an individual consultation.

More information about the IFMAPS program can be viewed at:

<http://www.agecon.okstate.edu/ifmaps>

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PRUNING DECIDUOUS SHRUBS

Gardeners are eager to get out and do something in the landscape this time of year. One chore that can be taken care of now is pruning certain shrubs. Often, gardeners approach pruning with trepidation, but it is not as difficult as it may seem. Remember, not all shrubs need to be pruned (i.e. witch hazel), and certain shrubs, which will be identified later, should not be pruned this time of year.

Shrubs are pruned to maintain or reduce size, rejuvenate growth, or to remove diseased, dead or damaged branches. Deciduous shrubs are those that lose their leaves each winter. Evergreen shrubs maintain foliage all year and include yews and junipers. Deciduous shrubs are placed into three groups:

- Those that flower in the spring on wood produced last year;
- Those that flower later in the year on current season's growth; and
- Those that may produce flowers, but those flowers are of little ornamental value.

Shrubs that flower in the spring should not be pruned until immediately after flowering. Though pruning earlier will not harm the health of the plant, the flowering display will be reduced. Examples of these types of plants include forsythia, lilac and mock orange. Shrubs that bloom on current season's growth or that do not produce ornamental flowers are best pruned in late winter to early spring. Examples include Rose-of-Sharon, pyracantha, Bumald spirea and Japanese spirea.

Pruning during the spring allows wounds to heal quickly without threat from insects or disease. There is no need to treat pruning cuts with paints or sealers. In fact, some of these products may retard healing. There are three basic methods used in pruning shrubs: thinning, heading back and rejuvenating.

Thinning is used to thin out branches from a shrub that is too dense. It is accomplished by removing most of the inward growing twigs by either cutting them back to a larger branch or cutting them back to just above an outward facing bud. On multi-stemmed shrubs, the oldest canes may be completely removed.

Heading back is done by removing the end of a branch by cutting it back to a bud and is used for either reducing height or keeping a shrub compact. Branches are not cut back to a uniform height because this results in a "witches-broom" effect.

Rejuvenation is the most severe type of pruning and may be used on multi-stem shrubs that have become too large with too many old branches to justify saving the younger canes. All stems are cut back to 3- to 5-inch stubs. This is not recommended for all shrubs but does work well for spirea, forsythia, pyracantha, ninebark, Russian almond, little leaf mock orange, shrub roses and flowering quince. (WU)

STOCKER MANAGEMENT AFFECTS FEEDLOT, CARCASS PERFORMANCE

Many producers believe the feedlot phase is the only one that influences beef quality grade, but the cow/calf and stocker phases also contribute to marbling.

“As a stocker operator, you know subsequent feedlot performance and quality grade help determine value for the cattle you sell,” said Larry Corah, Certified Angus Beef LLC (CAB).

Speaking at a Pfizer-sponsored stocker conference during the Cattle Industry Annual Convention, Jan. 31 to Feb. 3 in Nashville, Tenn., the CAB vice president explained cattle health at that stage of production has an effect on economics and feedlot performance.

“It’s been an amazing three and half years for those in the cattle business, but the real question is the future,” Corah said. “We see a new price structure for corn, escalating land prices and cattle marketed on individual merit. All of these factors impact the stocker industry dramatically.

“After years of shortening the stocker phase, cattle feeders will likely see more time between the cow/calf and feedlot segments as lower-cost weight gain systems are sought,” he said.

An Iowa Tri-County Steer Carcass Futurity study shows cattle treated once for bovine respiratory disease (BRD) had a mortality rate 3 percentage points higher than those never treated. Cattle with two treatments had nearly a 10 percent mortality rate.

Cattle facing health challenges also suffer in feedlot gain and efficiency, Corah said. The average daily gain (ADG) of cattle with no treatments is almost 0.3 pounds higher than those twice treatments.

“This translates to a difference in dollars returned per head,” Corah said. “The total disparity between those cattle treated twice and those never treated equals more than \$200 in lost profit.”

Corah discussed implant programs and gave three suggestions:

- When cattle are adapting to the stocker program, delay implanting;
- Avoid aggressive implants during this period;
- Question whether implants are even needed during the stock phase.

The stocker industry must move beyond the old strategy of merely maintaining calves for later compensatory gain. Cattle that barely get by as stockers are often severely compromised in their ability to grade.

Studies at Oklahoma State University show that effective deworming in the stocker phase can lead to a 20 percent increase in marbling and ability to grade Choice after finishing, Corah noted.

Other research in Nebraska showed an even greater impact from supplementing stockers on grass.

“With today’s growth and quality genetics, use of a pasture creep or other supplementation can add a pound to average daily gains and increase later ability to grade without deterring feedlot performance,” Corah said. “What’s more, it can boost carrying capacity by 40 percent on increasingly expensive land.”

Corah closed with data from the National Beef Quality Audit that showed the top concerns with feedlot cattle today.

“Those problems are deficient marbling, variability of product and excess fat,” he said. “All of these issues can be eliminated or diminished during the stocker phase if we pay attention to these options.”

MEXICO TOPS DESTINATIONS FOR U.S. BEEF EXPORTS IN 2006

2/23/2007 *Meatingplace.com*

On both a volume and value basis, Mexico was the top destination for U.S. beef exports in 2006, according to the U.S. Meat Export Federation.

The volume of beef exports to Mexico increased 32 percent to 371,087 metric tons, while the value jumped 33 percent to \$1.17 billion. Beef and variety meat exports to all destinations rose 39 percent by volume to 655,920 metric tons and 50 percent in value to \$2.04 billion.

In terms of volume, Mexico was also the top market in 2006 for U.S. pork, USMEF reported, while Japan was the top value market for pork, at \$1.04 billion. Overall, 2006 pork and variety meat exports totaled 1.26 million metric tons, up 9 percent from 2005, while their value also rose 9 percent, to \$2.86 billion.

DRIED DISTILLER’S GRAINS CAN HELP PRODUCE MORE BEEF

Supplemental feeding of dried distiller's grains to cattle can help produce more beef in grazing programs, says Jim MacDonald, a Texas Agricultural Experiment Station beef nutritionist.

After a summer and fall feeding study done with both heifers and steers, MacDonald said he believes this by-product of ethanol production will be useful in more than just feedlot or dairy operations. In the next few years, an additional 200 to

600 million gallons of ethanol are expected to be produced in the High Plains, MacDonald reports. Production will utilize up to 214 million bushels of corn or sorghum and result in 1.71 million tons of distiller's grains.

"A majority will likely be utilized by feedyards and dairies, but due to the sheer increase in availability, there should be opportunities for cow/calf and stocker operations to use it as well," he says.

The most promising opportunity may be in the situation where lightweight calves are held for a couple of months before they go onto wheat. In his summer grazing study using heifers averaging 600 pounds, he compared feeding 3 pounds of dried distiller's grain per head per day, or approximately 0.5% of the animal's body weight, to no supplement. Results showed an improvement in gain of a quarter of a pound per head per day over the control calves, according to MacDonald.

In the fall dormant range study, steers weighing approximately 400 pounds were compared at unsupplemented, 1-pound, 2-pound and 3-pound per head per day rates. Gain improved from just over one-half pound per head per day at the 1-pound rate to 1.75 pound per head per day at the highest level of supplementation.

"However, the effect was quadratic in that the more you supplemented, the incremental gain was lower," MacDonald says. "In other words, at the 1-pound rate, the efficiency of gain was about 50 percent, where at the highest rate, it was 40 percent."

During the summer trial, the efficiency was only about 10%, he says, because both sets of animals were eating well on grass and the supplementation did not make as big a difference." So supplementation is more efficient on dormant range, as you would expect," says MacDonald.

The economics of supplementing with distiller's grains will depend on the cost of the product compared to the value of gain, he adds. MacDonald paid \$118 per ton for the distiller's grains, which equated to a \$12.50 per head investment for \$18.80 per head in return over the 63 days the heifers were fed.

As corn prices have risen, so has that of distiller's grain. The same scenario now would have the producer paying \$175 per ton, which would result in a \$18.96 per head investment for a \$16.20 per head return. "Producers need to run the economics in their situation to see if it is a good fit," he emphasizes. The 56-day fall trial, using the \$175 per ton rate for the distiller's grains, resulted in a \$16.33 per head investment at the highest level of supplementation, MacDonald said. That investment was worth \$68.25 per head.

"The economics would say in the fall or winter scenario, producers will want to supplement at as high levels as possible," he suggests. "And even though this research is conducted with stocker calves, I think there is opportunity for cow/calf producers to utilize the distiller's grains as well," MacDonald concludes. The supplemental fat has shown to improve reproduction, as well as providing energy to maintain or improve body condition score.