

Beef CHAMPS

Beef Cattle Health and Management Production Strategies

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United States Department of Agriculture, University of Arkansas, and County Governments Cooperating

River Valley Beef Cattle Conference Set for February 11

DR. JEREMY POWELL, PROFESSOR AND VETERINARIAN

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An exciting agenda has been set for the 2015 River Valley Beef Cattle Conference. The meeting will take place at the Ouachita Livestock Auction in Ola, Arkansas, on February 11, with registration at the door beginning at 8:30 a.m.

This year's conference, which is sponsored by the University of Arkansas Division of Agriculture and Farm Credit Services of Western Arkansas, will cover many interesting topics that are pertinent to your beef cattle operation. Speakers and topics for the program include:

- **Jeremy Powell**, professor of animal science for the University of Arkansas Division of Agriculture, will discuss calf health - from birth to weaning.

- **Mark Wedel**, owner of Ouachita Livestock Auction, will speak about the beef cattle market and what cattle buyers are looking for.
- **Chris Burris**, manager of Ward Feedyard, will discuss what type of cattle works best in the feedyard.

Registration for the program is \$20 at the door. Lunch will be provided at noon, and the program will conclude around 1 p.m.

For more information, contact your county Extension office or visit www.uaex.edu or www.arkansas-livestock.com.

It's Time To Watch for Winter Tetany

DR. JEREMY POWELL, PROFESSOR AND VETERINARIAN

Once cool-season forages begin to reemerge in your grazing pastures, grass tetany can become a potential problem in grazing cattle. We typically see issues with grass tetany during the months of February, March and April. Cattle grazing the lush regrowth of spring grass or annual cereal forages, such as wheat, oats or rye, can experience a deficiency of magnesium leading to this problem.

Magnesium is a critical nutrient for normal nerve and muscle function. Early signs in cows affected by tetany include a decreased appetite, frequent urination and separation from the herd. This would be followed by increased excitability, muscle spasms around the face and ears as well as a stiff or unsteady gait. These early signs may occur over a short two- to three-hour period,

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making early detection difficult. As the disease progresses, an affected cow will lose normal muscle control. This forces the affected animal to lie down and become unable to get up. If your cattle are not checked often, a dead cow may be the first sign of a problem.

Grass tetany is due to an abnormally low level of magnesium in the cow's body, and lactating cows are more susceptible. Ruminant animals absorb magnesium from the intestinal tract much less efficiently than other species. Magnesium and calcium levels can also be low in a cow's body due to losses in milk during lactation or due to an increase in a cow's potassium intake. High potassium levels occur in young, rapidly growing forage and can be a problem in cool-season grasses such as fescue or in winter cereal grains. Tetany can also occur in cows being fed grass hay in a dry lot

situation, particularly when the hay is low in calcium and magnesium and simultaneously high in potassium.



Other factors such as spring fertilizer application can also increase the potential for grass tetany to occur. Heavy fertilization of grazing pastures especially with potassium (potash) in the late winter or early spring may further inhibit magnesium absorption for the cow. Weather is another influence for grass tetany. Cloudy conditions decrease the plant's ability to utilize magnesium, making it even less available to grazing

animals, so tetany may be more often observed on cloudy or rainy days.

Prevention is the key to controlling grass tetany. This can be achieved by dispensing a salt-mineral supplement containing at least 10 percent magnesium that can be utilized daily. Successful prevention begins with providing 2 to 4 ounces of mineral supplement containing 10 percent magnesium oxide per animal per day. The supplement must be provided on a daily basis because the cow's body has no ability to store reserves. Several mineral feeders should be made available if stocking rates are higher. Producers should remain vigilant this time of year to prevent tetany from becoming a problem in the herd.

For more information about grass tetany and general herd management, contact your county Extension office.

Bull Buyer Balancing Act

BRYAN KUTZ, INSTRUCTOR

Advertisements for purebred bull sales are plentiful. Sale time will be here before you know it this spring, and it is never too late to begin planning for your next herd bull purchase. Underestimating the impact of the herd bull can prove detrimental to your beef business. Selecting and purchasing your next herd sire could be considered the most important decision you make in your operation. Keep in mind that your bull will account for approximately 90 percent of the gene pool, contributing more to the genetic makeup of a herd in one breeding season than a cow contributes in her lifetime.

This investment should add efficiency and profitability to your herd for years to come. The cost of purchasing a bull may seem high at first glance; however, that expense becomes relatively small when it is spread over three to five years of calf crops. Remember the expense of the new bull can be calculated as the difference between the purchase price of the new bull and the salvage value of the old bull. And, if you add pounds to your future calf crops through your new purchase, then you will have profitable returns on your investment.

From the onset, producers need to have a production goal

in mind and consequently a direction for genetic improvement. Having a breeding objective planned will help keep producers from straying too far away from the traits most pertinent to reaching their endpoint. Ask questions that pertain to your particular production situation. These should include things like forage and labor availability, marketing endpoint and replacement strategy. Then, focus on the selection index that best fits your program's goals.

Breeders should have performance EPDs available for buyers. Birth weight, weaning weight, yearling weight and milk values are commonly available;

however, most breed associations now have a plethora of EPDs that include carcass traits as well. Advances in National Cattle Evaluation have made estimating a bull's genetic worth more accurate than ever before. EPDs allow valid comparisons of all bulls of the same breed, and across-breed charts are now available so that comparisons can be made between two different breeds. With that said, the amount of information available to a producer in the form of actual performance, expected progeny differences and selection indexes can be overwhelming in pinpointing the traits to place more selection pressure on to fit the needs of your beef business.

Evaluate your current cow base and calf crop and make a decision based on your results. Your bull should complement your cows in hopes of increasing hybrid vigor and improving traits that will maximize your production goals, match target markets and improve bottom line profitability. Now, depending on a herd's production scenario, various traits provide different economic benefits. For example, if a producer retains ownership and sells cattle on a carcass basis, placing all the selection pressure on calving ease, weaning growth and maternal traits creates a disconnect between selection

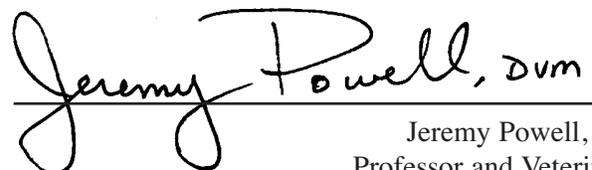
and marketing. The producer in this scenario doesn't have much opportunity to capture weaned calf value and quality heifer retention and eliminate selection pressure on carcass merit that is the most economically important in this scenario. In contrast, producers seeking to provide their own replacements should avoid EPDs or indexes focused on carcass traits. Applying equal pressure to all the traits with EPDs dramatically limits progress in those that are the most economically important. Single-trait selection, while providing the most opportunity to change a single trait, leaves out other traits of importance and generates significant genetic risk.

Your bull should complement your cows in hopes of increasing hybrid vigor and improving traits that will maximize your production goals, match target markets and improve bottom line profitability.

At the same time, you must not forget about the visual factors that come along with the bull you purchase. He should be functionally sound resulting in herd sire longevity and ability to fulfill his breeding requirements. At most sales, a Breeding Soundness Exam has been performed, but if you are buying from an

individual, always request a BSE. Remember that a bull is only as good as his semen. A cow is responsible for half the genetic material in only one calf each year, while the bull is responsible for half the genetic material in 20 to 50 calves. The ability of the bull to locate cows in estrus and breed is clearly vital to a successful breeding program. Other factors to consider are disposition, libido, body shape, frame size, condition and muscling.

Purchasing a new herd bull can be a difficult balancing act, and producers should remember that when using EPDs or selection indexes, the one chosen should align with their marketing endpoint and hopefully result in optimum profit. While one approach may be to apply more pressure on one or two traits, it is always best to strike a balance among various traits and avoid extremes. Purchase a bull based on the purpose of your breeding plan. This process must include those traits that are economically important and highly heritable. Keep in mind that not every bull will fit your production scenario, but the decision you make with your purchase, if done properly, will be invaluable in influencing your beef production for the next several years.



Jeremy Powell, DVM
Professor and Veterinarian