

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

Select the Sire That Works for You

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It won't be long until breeding season for herds that calve in the spring, and it is never too late to start planning. Improvement of next year's calf crop is dependent upon the breeding decisions you are about to make. Herd sire selection should be a thought-provoking and profit-driven decision process. Males 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. Selecting genetically superior sires is the fastest approach to herd improvement and, ultimately, bottom line profitability.

Not every bull will fit your production scenario. Resources and goals are different for each cow-calf operation. Nonetheless, sire selection should target an acceptable combination of traits that complement the strengths and weaknesses of the cow herd and match markets.

Ask questions that pertain to your particular production situation. What are your target markets? Are you selling all calves at weaning? If so, what color does that market value the most? Are you planning to background your calves and send them through the feedlot? Are you going to retain any replacement heifers? Are you breeding both heifers and cows? What are your available labor and forage resources? Answers to these questions will aid you in determining the selection efforts you may want to apply towards

economically important traits such as growth, carcass traits and possible maternal performance. Feet and leg soundness, libido, disposition, scrotal size, sheath, frame size, composition, breed type and horn presence or absence are also important traits for consideration. While one may apply more pressure on one or two traits, remember to strike a balance among various traits and avoid extremes. Base the type of sire selected on the purpose of your breeding plan.

While I strongly believe in the correct visual appraisal of an animal, the use of genetic selection with expected progeny differences (EPD) can be an extremely valuable tool. EPDs provide predictions of the expected performance of the calves sired by a bull

compared to the expected performance of calves sired by another bull.

EPDs are the best predictors of the genetic performance of an individual animal, and they are available for a growing number of economically relevant traits. Breeds are different and make available a wide variety of EPDs, however; most breeds have basic EPDs, such as birth weight, weaning weight, yearling weight and milk. A large number of breed associations have implemented the use of selection indices. These are based on multiple traits weighted for economic importance, heritability and genetic associations among traits. A selection index may

(Continued, page 2)

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Check Bull Fertility Before the Breeding Season

JEREMY POWELL

Breeding season is right around the corner. A bull that is not reproductively sound can mean disaster for pregnancy rates in your herd, but risk of experiencing problems with bull fertility can be minimized through the use of a breeding soundness evaluation (BSE). Bulls can differ in their reproductive capabilities, and research studies show that approximately 20 percent (one in five beef bulls) that undergo a BSE are not satisfactory breeders. Because the breeding potential of a bull can change over time, a BSE should be conducted on an annual basis. Information provided by a BSE is useful in determining a bull's fertility, and the test should be performed about 30 to 60 days prior to the start of the breeding season to allow enough time for replacement of bulls that were graded deferred or unsatisfactory breeders.

A BSE is a practical method to identify bulls with less than satisfactory breeding potential. The first step in a BSE is to select a veterinarian in your area who is competent in conducting a complete BSE. The exam includes an evaluation of the bull's physical and reproductive ability to successfully mate. Both internal and external portions of the reproductive tract are examined or palpated for abnormalities. Disease, injury and environmental conditions can affect proper function of the reproductive organs and impair performance. Scrotal circumference is measured, and a larger scrotal circumference can indicate

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enhanced semen-producing capacity. In addition, as scrotal circumference increases, daughter age at puberty decreases, which has implications for the lifetime productivity of a bull's daughters. A semen quality evaluation assesses morphology and motility of the bull's ejaculate. Minimum requirements for acceptable semen quality are 70 percent normal sperm and 30 percent motile sperm.

A bull's physical examination is also important because the bull must be physically sound to travel across pastures during breeding, find cows and heifers in heat and successfully mate with the females. To meet these objectives, bulls

require sound feet and legs for ease of movement as well as good vision. Bulls should still be observed during the breeding season for normal libido.

Obviously, results from using an infertile bull could be very disappointing, and you cannot afford to use a bull that is not a satisfactory potential breeder. An annual BSE is essential, especially when there is only one bull for the entire operation, and it will greatly reduce risks associated with an infertile bull.

For more information on determining bull management, see a University of Arkansas Cooperative Extension Service publication at <http://www.uaex.edu/publications/PDF/MP502.pdf>.

2014 Youth Livestock Judging Camp Approaching Fast

BRYAN KUTZ

Each year the University of Arkansas Animal Science Department hosts a livestock judging camp where youth from across Arkansas and surrounding states can learn about the priorities in livestock selection, update themselves on the current industry trends and improve their communication skills through the presentation of oral reasons. This year's camp will be held Monday, June 23, through Wednesday, June 25.

At the camp, students are divided into three groups, depending on knowledge level and experience. They will work the first two days learning all they can about sheep, cattle, hogs and the reasons and terminology that accompany each species.

The second day will end with some fun leadership activities in which students will compete in redneck relay, egg tossing and the traditional water balloon fight and ice cream social. On the last day, the kids will be put to the test on what they learned in a judging contest consisting of six classes with three sets of oral reasons. The top two scores overall in the advanced group will receive a scholarship to attend the U of A and major in animal science.

Early deadline for entry is May 16. If you are interested, contact your county extension office or FFA advisor. You can also contact Diana Watson at (479) 575-4845 at the University of Arkansas Animal Science Department.

Select the Sire That Works for You *(Continued)*

provide a balanced selection approach when selecting for more than one trait at a time.

Beef cattle selection should be based on many factors. The knowledge gathered from your production needs and concerns is invaluable in your sire selection endeavor. The more information used in this process, the fewer surprises

you will have for generations to come. It is important to use both performance information and visual appraisal in choosing a sire that suits you and your production goals. They should complement each other. A balanced approach to sire selection, focusing on multiple economically important traits, can go a long way towards herd genetic improvement.

FDA Guidance Will Affect Medicated Feed for Beef Cattle

JEREMY POWELL

In December 2013, the U.S. Food and Drug Administration (FDA) released its guidance for industry #213 (GFI #213). Through these recommendations, the FDA has focused on phasing out the use of antimicrobial drugs administered to food-producing animals in medicated feed or drinking water for “production indications.” These production indications would include the use of a medicated feed product for increased rate of weight gain or improved feed efficiency. These guidelines direct drug sponsors to specifically seek changes in antibiotic medicated feed labeling that has been determined to be important in human medicine with the intent to address growing concerns regarding antibiotic drug resistance.

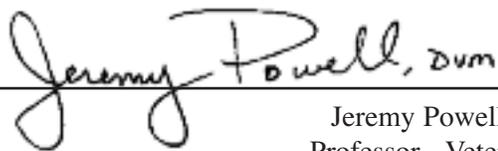
The guidance declares that using certain antibiotic medications in food-producing animals to promote growth or improve feed efficiency is not considered judicious or responsible. However, the FDA points out that the use of these medicated feed antibiotics for the prevention and treatment of disease is considered responsible when the medicine has evidence of efficacy for a specific disease. Therefore, the medicated feed products may still be labeled and used for the purpose of disease control and prevention. The FDA suggested a three-year phase-in for their proposal, allowing sufficient time for pharmaceutical companies to make proposed product label changes and for livestock producers to prepare for resulting changes in their management practices.

GFI #213 declares that using certain antibiotic medication in food-producing animals to promote growth or improve feed efficiency is not considered judicious or responsible.

Drug sponsors were given a three-month period in which to indicate whether or not they intend to voluntarily comply in the removal of “production indications” from their affected drug labels. So far, all but one pharmaceutical company have committed in writing to comply with the new voluntary guidelines. The companies that have pledged compliance market over 99 percent of the drugs affected by GFI #213. In a recent press release, the FDA indicated it was encouraged by the strong response from pharmaceutical companies’ willingness to comply, and it intends to continue monitoring participation and provide public updates periodically.

In another coordinated action, the FDA is proposing to change many medicated feed antibiotics from their current over-the-counter (OTC) status to use by Veterinary Feed Directive (VFD) or, in other words, by veterinary prescription only. In the proposed rule, the FDA notes that the majority of antibiotic medicated feed products can currently be used by livestock producers without veterinary oversight or consultation. As the FDA begins to implement their proposed framework set forth in GFI #213, the agency intends for the VFD to provide effective supervision and management of medicated feed products used in food-producing animals. For more information regarding the FDA’s proposed guidelines, click on the following web site:

<http://www.fda.gov/downloads/animalveterinary/guidancecomplianceenforcement/guidanceforindustry/ucm299624.pdf>



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