

## Upcoming Events

Invasive Grass and Weed Workshop will be  
from 3-6 p.m.

May 3<sup>rd</sup> — Gillette

May 10<sup>th</sup> — Sheridan

May 17<sup>th</sup> — Sundance

Questions?

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Extension  
Crook County

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## Agriculture and Natural Resources Newsletter

Information in this edition includes:

### Beef Cattle Management



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## Beef Cattle Management

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As branding and breeding season approaches, there are a few considerations to keep in mind to increase the overall health of our animals. Profitability for the cow-calf producer is dependent on healthy calves and on high conception rates.

### Herd Health Plan

Branding season, the time to manage our calves (identification, castration, dehorning, and administering blackleg shots), has arrived. An appropriate Herd Health Plan/Protocol (HHP) ensures that all cattle are raised in the best health (Elrich, 2015). To ensure sustainable beef cattle production, a HPP yearly production calendar is needed. The HPP should include cattle nutrition, reproduction, vaccination schedules, and marketing. Proper vaccination and cattle handling procedures are essential to promoting overall health.

A producer should work with their veterinarian to create a vaccination and overall health plan that best suits their management goals and resources. The veterinarian can help a beef operation best tailor health management to deal with local diseases, parasites, and other regional health issues (Elrich, 2015). The core vaccination program for calves (birth to three months of age) should include: 4-way IBR,

BVD, PI3, BRSV; 2-way Pasteurella; and 4/7-way Clostridial. Additional considerations include fly control and deworming. Depending on labor and timing, developing a strong plan can improve effectiveness and economics for the operation.

When applying vaccinations, it is important to follow Beef Quality Assurance (BQA) guidelines (see Figure 1 below). Additionally, it is important to read all product labels and follow all instructions.

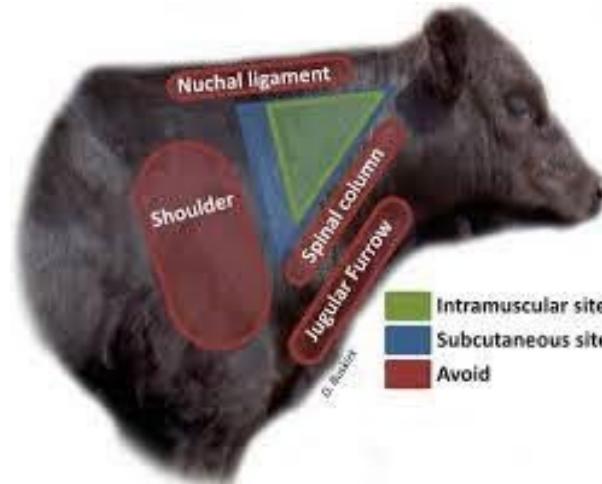


Figure 1: Illustrates the appropriate vaccination locations as recommended by the BQA guidelines.

In addition to vaccinating young calves, producers need to develop plans for good management practices for castration, dehorning, and branding (if applicable) (Elrich, 2015). Branding time always reminds us of a hopeful future. Advanced planning with your

veterinarian can make the future of your calves and cow herd look even brighter (Griffin and Randle, 2015).

To be successful during branding season, it is important to follow BQA guidelines, read product labels, talk to your veterinarian, and handle cattle with as little stress as possible.

### Breeding Soundness Exam (BSE)

As producers, one of our main management goals is to have high conception rates. In order to achieve high conception rates our cows and bulls have to be in proper body condition; furthermore, our bulls must also be sound and fertile.

Reproductive success requires bull(s) that can detect cows in estrus. Additionally, they must successfully mount and deliver viable normal sperm into the reproductive tract of the cow (Hardin, 2015). A proven method to test the breeding potential of bulls is through a BSE. Producers searching for a cost-efficient method to promote a successful breeding program may find breeding soundness examinations (BSEs) for bulls beneficial (Rasby, 2012).

The production of sperm is a 61-day process; therefore, it is recommended that BSEs are completed through your vet within 30-60 days of the start of your breeding season. This time frame allows you to find replacement bulls if needed. BSEs are a relatively quick and

economical procedure. This method is most effective in identifying bulls at the lower end of the fertility spectrum. Furthermore, it's a screening procedure that places bulls into categories of satisfactory, unsatisfactory, or deferred (Hardin, 2015).

During a BSE your vet evaluates your bulls on their:

- Body condition via a physical exam
- Lameness
- Eyesight
- Internal structures of the reproductive system are examined (i.e. prostate, seminal vesicles, ampulla, and inguinal rings) to ensure normalcy
- External structures of the reproductive system (penis, prepuce, sheath, testicles, scrotum, and epididymis) are also examined for normalcy
  - Scrotal circumference is measured and adequacy is determined based on established standards by age to evaluate the daily production of high-quality sperm
- Semen to determine sperm motility and the percent of morphologically normal sperm

Any bull meeting all minimum standards for the physical exam, scrotal size, and semen quality will be classed as a "satisfactory" potential breeder. Bulls that fail any minimum standard will be given a rating of "classification

deferred" (Rasby, 2012). To successfully complete a BSE, a bull must have at least 30 percent progressive motility (does the individual sperm move in a forward progression?), 70 percent normal sperm morphology (are there any problems with sperm formation?), and a minimum scrotal circumference based on age (McCarthy and Waechter-Mead, 2022).

It is important to test your young bulls as well as older bulls. Furthermore, it is important to test your dominant because if your dominant bull(s) are unsatisfactory then conception rates can significantly decrease. During the breeding season, it is important to observe your bulls and evaluate their soundness. If your dominant bull gets lame, it is important to remove him from your herd because sound feet and legs are very important. If they are unsound, this can result in the inability to travel and mount for mating.

When buying or leasing a bull (introducing an outside bull into your herd) it is important to consider EPD traits that fit your management goals and your cows. Additionally, it is important to test these bulls for sexually transmitted diseases such as Trich.

Additionally, when creating your breeding management plan, it is important to consider the desirable length of your calving season and when you want to calve to determine when and how long to expose your cows. Additionally, the recommended cow to mature bull ratio is 25:1. The recommended cow to yearling bull

ratio is 15:1. Factors such as the length of the desirable calving season, topography, and size of the pasture influence the cow to bull ratio needed. Therefore, these numbers should be adjusted to fit your operation and your management goals.

## Summary

Profitability of our cow-calf depends on a healthy herd and high conception rates. Therefore, as branding approaches, it is important we create our herd health plan to promote a sustainable beef cow herd. Applying proper vaccinations using BQA guidelines and product label directions can improve the overall health of your herd. Additionally, as producers it is important that we have our veterinarian not only help us with our vaccine protocols but also with our BSE. BSE is a cost-effective program that evaluates the ability of your bulls to breed. Having bulls(s) that are not able to breed can significantly reduce your conception rates. Therefore, as we move into breeding season we must not only ensure that our cows and bulls are in proper body condition but also that we establish our desired breeding season and test our bulls to make sure they are able to breed.

## Sources for Further Reading on Beef Cattle Management

Elrich, R., 2015. Nebraska BQA: Starting Newborn Calves Off Right. University of Nebraska Lincoln.

Griffin, D. and Randle, R., 2105. Branding/  
Pre-Breeding- Calf and Cow Management  
Activities to Consider. University of Nebraska  
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A risk management tool for cow-calf  
producers. University of Nebraska Lincoln

McCarthy, K. and Waechter-Mead, L., 2022.  
How Valu-Bull are Breeding Soundness  
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Rasby, R., 2012. Breeding soundness  
evaluation for a bull. University of Nebraska  
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