



Ag Health News

LABORATORIES



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Beef Cow Nutrition – How do I afford to feed my cows?

Winter feed costs are typically the number one factor in the profitability of commercial beef cattle operations. With current feed prices at all time highs it is even more critical to provide only the required nutrients with the lowest cost feeds available. This is not to say we should skimp on feed quality or quantity to save money.

Inadequate nutrition in late gestation and early lactation are often the primary cause of not only sick cows, but of poor reproductive performance the following summer. This is especially true in first calf heifers and commonly results in too many open cows come fall. It also results in wider calving seasons leading to reduced calf performance and lighter weaning weights next fall. In order to make money, we must make babies. Reproductive efficiency is critical and heavily influenced by nutrition.

Due to these factors and a personal interest in both beef cattle and nutrition, I started focusing on learning more about beef cattle nutrition. The goal is to provide nutrition advice as a service to help cattle producers become and/or remain profitable. While in the Southwest in the late 90's I did nutrition work for dairy clients and my nutrition interests were largely responsible for starting the Ag Health Feed Lab. This fall I attended a short course on Beef Cattle Nutrition at our American Association of Bovine Practitioners conference to learn what's new and effective in the beef nutrition world. We were taught the ins and outs of a nutrition program called Brands which allows us to put together a ration of mixed hays, grains, or other byproducts to achieve the proper nutrient levels and do so at the cheapest price. This wouldn't qualify as an Ag Health Newsletter without mentioning the course instructors repeatedly hammered us with the need to test your feeds at a quality feed lab in order to use a program to balance nutrients. This is something some of you are already doing.

If you are interested in nutritional help and fine tuning your winter nutrition, please contact me at Ag Health Labs. The wonderful and talented staff at Ag Health can also answer questions about sampling procedures (see our past newsletters on the website for sampling instructions) or testing procedures and results. Dr. Lynn VanWieringen, our PhD ruminant nutritionist managing the lab is available to answer questions about feed quality and interpretation of results.

Thanks, and Happy Feeding! Dr. Fred.

BioPRYN – Right for Beef Cattle?

BioPRYN is a blood pregnancy test for cattle which has been rapidly growing in popularity across the United States as well as globally. It became economically available from the manufacturers, Biotracking, LLC, in 2002 and Ag Health Labs was the first commercial lab to offer the test in the country. BioPRYN is an ELISA test for a protein called Pregnancy Specific Protein B (PSPB) which is produced by the placenta of a pregnant cow. The test can be run in cows bred more than 30 days and 90 days post calving.

Initially the marketing of BioPRYN was targeted towards dairy cattle, but over the years it has become widely adopted in beef herds as well. The test is extremely **accurate** (~97% which is better than many palpators) and often very **convenient** for the producers. There is no scheduling around a Veterinarian so samples can be pulled whenever you desire. For some producers it is inconvenient to get the test results in 2 days and then have to sort out open cows, but for many producers this is not a difficult issue. In many cases it is **cheaper** to use BioPRYN at < \$3.00 per cow than a palpator, depending on travel distance and speed of your facilities and crew.

BioPRYN is not promoted as a way to age or date pregnancies, however some very successful and large beef producers have been using it in this way. Basically the PSPB and subsequent BioPRYN reading goes steadily up after 70 days pregnant, so there is some ability to group cows for calving period based on the BioPRYN reading. The official accuracy of BioPRYN is simply identifying cows as pregnant or open.

Check out the latest edition of Progressive Cattlemen to learn more about using BioPRYN in a feedlot setting.

What is a BVD PI?

Bovine Viral Diarrhea virus (BVDV) is an organism responsible for several different disease processes in cattle including Bovine Respiratory disease, mucosal disease, and reproductive disease from infertility to abortions and deformities. One of the main methods BVDV causes disease is by suppressing the immune system of an animal and allowing other viruses or bacteria to establish infections and cause further illness.

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Stockmanship 101

Many producers, both beef and dairy, have employees working with their animals on a daily basis. You also have a consumer/public concerned with how you and your employees treat your animals. Several of your veterinarians attended a full day seminar at the Washington State Vet Medical Association meeting this month to learn how to improve stockmanship and how to train employees on good stockmanship. If you have any questions about stockmanship training ask your veterinarian if they attended the course or contact Dr. Fred Muller for more information.

What is BVD PI? *Continued from Page 1-* BVDV also has a unique ability to develop Persistent Infections or a PI. A PI occurs when a fetus becomes infected with a certain strain of BVDV between 80 and 125 days of gestation. This period is when the calf's immune system is developing and the fetus basically decides that because BVDV was present when it (the immune system) began, then the BVDV must be part of the normal calf. Therefore the immune system accepts the virus as "self" and never tries to fight off or remove the virus.

The result is a calf born with very high levels of BVDV circulating through its blood and shedding the virus in every fluid leaving the calf's body; mucous, urine, feces, semen, breath, etc. The problem arises when other animals come into contact with this high shedding PI calf, they respond to the virus, often causing immune suppression and leading to pneumonia, abortions, or other illnesses. Even in the face of a well vaccinated herd, a BVD-PI can shed so much virus its vaccinated herd mates can still become ill.

How do we avoid and combat a BVD-PI? Watch for the next newsletter for more information or talk to your veterinarian, but it basically involves removing any PI calves from your operation and keeping the herd well vaccinated to avoid creating more PI's.