Winter Extremes Especially Hard on Cattle This Year

Dr. Jeremy Powell

The extreme weather we have experienced during the past year has affected our forage production in Arkansas. Many parts of Arkansas have been exceedingly dry during the summer and fall months, and some producers have been feeding hay since midsummer. So, not only was hay scarce going into winter, but also the hay that was cut last year may have been cut late and at a more mature stage due to the flooding and heavy rains we received last spring. More mature hay will have less nutritional value and more stem than hay cut during average years. These factors have led to cattle entering the winter in poor body condition just when her nutritional requirements will begin to increase.

Many cows will be dealing with increased nutritional requirements due to heavy gestation and colder temperatures, and some cows will begin calving. Because of poor pasture conditions and prolonged hay feeding, cows will be facing these increased nutritional demands in poorer body condition compared to an average year. This can lead to health problems such as protein and energy malnutrition, where a cow’s energy demands exceed her daily intake. Cows may appear to have a good appetite and exhibit rumen fill but not necessarily exhibit good body condition and are in a negative energy balance. Eating poor-quality hay may not provide adequate energy to a cow in this situation, and the cow will continue to lose body weight. This issue generally occurs during late gestation in cattle exhibiting poor body condition, and pregnant heifers are particularly susceptible. Affected cows may tremble and stumble, eventually going down and being unable to get up. This most commonly occurs in combination with a cold snap, and once animals go down, treatment is usually unsuccessful. Preventing the issue with adequate nutrition is the best approach.

Also, winter tetany could be an issue this year. This is similar to grass tetany, which often occurs in the spring with new forage growth. With winter tetany, cows develop a combination of low blood magnesium and calcium. It occurs most commonly when mineral supplementation has been neglected during a long period of hay feeding, and lactating cows are...
most susceptible. Stress related to factors such as severe winter weather or from hauling and handling can induce clinical signs of winter tetany. Clinical signs associated with winter tetany include nervousness, stumbling, muscle twitching, and finally a cow that goes down cannot rise. A veterinarian should treat cows immediately; otherwise, death can occur.

Lastly, parasite burdens may be abnormally high this winter. With poor pasture and low forage height during summer and fall, cows were grazing closer to the ground and nearer to fecal pats, allowing more parasite larvae to infect them. Intestinal parasites may be robbing what little nutrition the cow is receiving from her daily intake. Internal parasites in the gastrointestinal tract may cause loss of body condition, diarrhea, and weakness, exacerbating the other issues mentioned above.

Also, winter is the most common time to see lice and mite infestations, which cause loss of body condition and anemia. Control of both internal and external parasites with dewormers and insecticides is critical this winter.

Problems observed this winter will likely carry into spring. Cows will be calving in below normal body condition. Colostrum quality may be inferior compared to normal years, leading to decreased calf immunity and calf health problems. Also, thin cows can be expected to have fertility issues during the following breeding season, resulting in lower pregnancy rates.

To prevent potential problems, producers should take an inventory of body condition scores on the cows in their herd. Sort cows based on body condition, and supplement the animals that are in need of better nutrition.

Winter is never easy, but this one may be even harder. Be aware that potential problems exist this winter due to the shortage of pasture and poor hay production we experienced. Plan now to prevent future losses in production or death losses, which can have a permanent impact on the sustainability your operation.

Trichomoniasis Cases Continue to Rise in Arkansas

A total of 97 cases of Trichomoniasis were reported in Arkansas during 2011. That number had been increasing steadily since new regulations were set in place last year, indicating that any breeding bull changing ownership in Arkansas must be accompanied by a negative test for trichomoniasis. The new regulations only exempt bulls that are going directly for slaughter, bulls accompanied by an Arkansas Virgin Bull Affidavit (virgin bulls under 24 months of age), or bulls sold for feeding and slaughter. Similar regulations have recently been adopted by other states across the U.S. to target the control of this disease in cattle.

Trichomoniasis, commonly referred to as “trich,” is a venereal disease of cattle caused by the protozoa organism Tritrichomonas foetus. The disease leads to infertility, poor pregnancy rates, an extended breeding season and a diminished calf crop in cattle, which is very costly to producers. Trich is transmitted from an infected bull to the cow’s reproductive tract during breeding. Infected cows will experience infertility and early embryonic death, causing the cow to return to estrus (heat) and subsequently leading to poor pregnancy rates and an extended breeding season. Trichomoniasis causes very few outward signs of illness in infected bulls and infertility in cows may go unnoticed, allowing it to be present for a considerable time before it is suspected and diagnosed. Most bulls (especially bulls over 4 years of age), once infected, will stay infected for life. Currently, there is no approved treatment for breeding bulls in the U.S.; therefore, infected bulls must be condemned to slaughter. The majority of infected cows will clear the infection if given 120 to 150 days of sexual rest.
Testing for trichomoniasis can be performed by your veterinarian, and testing can be easily accomplished in your herd bulls when performed in conjunction with a breeding soundness exam.

Two weeks of breeding rest is recommended before a bull is tested. This allows the infectious organisms time to build up to a detectable level. A testing sample is collected by scraping the inside of the preputial sheath; it is then placed into special growth media and shipped to a laboratory. Results can be expected in about seven days. Trichomoniasis is a reportable disease in Arkansas, and any bulls testing positive will be sent to slaughter within two weeks.

A current list of regulations regarding trichomoniasis in Arkansas can be found at the The Arkansas Livestock and Poultry Commission web site http://alpc.arkansas.gov/

Cattlemen can be proactive to protect their herds from becoming exposed to trichomoniasis by following these recommendations:

- When purchasing bulls, purchase virgin bulls if possible.
- Keep fences in good repair to prevent accidental contact with potentially infected cattle. Monitor traffic in and out of the herd.
- When purchasing female replacements, purchase virgin heifers and/or mature cows from a reputable source.
- If you suspect a disease issue in your herd, test your current bull battery for trichomoniasis. Any positive bulls should be culled and sold for slaughter.
- Maintain a defined breeding season, and perform a pregnancy check in a timely manner afterwards to identify a potential problem early. Keep good records of a herd’s reproductive efficiency, and use these to help identify a possible problem.

Map and case information provided by Dr. Pat Badley, Arkansas Livestock and Poultry Commission.

River Valley Beef Cattle Conference Set for February 15th

An exciting agenda has been set for the 2012 River Valley Beef Cattle Conference. The meeting will take place at the 101 Livestock Auction in Morrilton, Arkansas, on February 15 with registration at the door beginning at 9:30 a.m.

This year’s conference, which is sponsored by the University of Arkansas Cooperative Extension Service and Farm Credit Services of Western Arkansas, will cover many interesting topics that are important for profitability in today’s market. Speakers and topics for the program include:

- **Jeremy Powell**, associate professor of Animal Science for the University of Arkansas Division of Agriculture, will discuss how to protect your herd against trichomoniasis. There has been a rising number of cases of trich in Arkansas, and new regulations have been in place since last year regarding the disease.
- **John Riley**, assistant professor of Agriculture Economics for Mississippi State University, will speak about the beef cattle market and if it is time to expand the herd.
- **John Boyd**, professor of Weed Science for the University of Arkansas Division of Agriculture, will discuss cost-effective weed control.

Registration for the program is $20 at the door. Lunch will be provided at noon. The program will conclude around 1 p.m. For more information, contact your county Extension office.

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