Summer Management Considerations for Beef Cattle

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The days are long, the nights are short, and the heat of the summer is upon us. As we push through the dog days of summer, we want to make sure that we provide, prevent, and plan the following for our cattle herds:

Provide

Water is one of the five basic classes of nutrients required for all classes of beef cattle, and makes up about 98% of all molecules in the body. It is critical for a range of body functions including growth, reproduction, lactation, digestion, temperature regulation, and waste removal. Daily animal water requirements are dependent on the stage of production, physical activity, type of diet, feed intake and the environment. There is nothing like a cold drink of water on a hot day, and water intake is often greatest during the summer months for beef cattle. Water requirements roughly double as the temperature increases from 50 to 95°F. In general, as the size of the animal increases, water requirements also increase. The following table illustrates the daily water intake needs in gallons at various stages of production:

	Temperature	
Stage of production	70°F	90°F
400-lb calf	6 gal.	9.5 gal.
800-lb feeder	11 gal.	17 gal.
1,000-lb dry, pregnant cow	11 gal.	17 gal.
1,000-lb lactating cow	16 gal.	20 gal.

†Adapted from the Nutrient Requirements of Beef Cattle, 7th Revised Ed. Update (2000); J. Anim. Sci. 15:722

Mature, lactating cows can consume more than 20 gallons of water per day during hot weather. Check water sources often to make sure an adequate supply of clean water is available to animals. Providing easy access to a quality water source is important in maintaining adequate water intake and animal health.

Prevent

Fly populations begin to increase during the summer months, and control and prevention programs are necessary. One of the most common fly problems in Alabama is associated with the horn fly. It is estimated that the horn fly causes close to $800 million in economic losses nationwide to cattlemen every year. Horn flies can cause significant blood loss and change animal behavior. Cattle begin to alter grazing patterns, gather in groups, and may have significant energy losses associated with

battling horn flies. Reduced energy can often mean decreased milk production and calf weaning weights.

There are several prevention options available for fly control in beef cattle. Whether it is ear tags, sprays, dust bags, etc., the most effective fly control programs rotate between products containing different chemical classes to prevent resistance. Resistance occurs when a product is highly effective at controlling flies for a given period, but then quickly becomes ineffective. Using products with the same active ingredient for an extended period of time decreases fly control effectiveness. In order to decrease resistance, rotating between pyrethroid and organophosphate-containing products is recommended. If insecticide-containing ear tags are used as a control method, a 4-year tag rotation system is suggested. For example, a tag containing organophosphates is used for the first two years, followed by a pyrethroid tag in the third year, and then an organophosphate tag in the fourth year. The use of a pyrethroid tag for more than two years in such a rotation is not recommended. Remove tags at the end of the season to prevent flies from being exposed to low levels of insecticide that can lead to resistance. In the case of horn flies, do not begin to treat cattle until flies exceed the threshold of 200 flies per animal. At this point, it becomes economically advantageous to treat animals and the chance for insecticide resistance is decreased. As always, it is important to follow the label directions for animal health products for them to be used safely and effectively. For more information on fly control, refer to publication ANR-2083 Fly Control for Alabama Cattle Operations (www.aces.edu/pubs).

Plan

Planning your stored feed needs for this winter can never start too early. We are in the midst of the hay-making season, and many of you may have already put up an ample supply for the winter. Certainly Mother Nature can be our friend or foe during this time of year when it comes to the hay business, but forage maturity at harvest is extremely important for producing high-quality hay. Excessive and untimely rainfall last year prevented us from getting into the field and harvesting forage at the right stage of maturity. This caused a significant decrease in hay quality observed across the Southeast, and increased our need for supplementation to meet our animal's nutrient requirements. Supplemental feed prices are generally quite high in the winter months, and it is advantageous to plan now for expected feed needs when a lower price point may be observed. Although the cost of co-products has increased over the past several years, the lowest prices of commonly used sources such as corn gluten feed and soyhulls are usually seen from early May to early July. After this, prices begin to increase through the winter months. The best way to save on feed costs is to watch prices and have an adequate storage facility to capitalize on low prices and store feed until your time of need.

In summary, the most effective managers balance their day-to-day tasks while planning for the future. By using these practices into our management systems, we can beat the heat and push through the last half of the summer.

*This article is the first in a series of five articles on Management Systems for Changing Seasons

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