



BEEF SOLUTIONS

Help your cattle manage heat and flies this summer

By: Janna Block, Ph.D., Hubbard Feeds Beef Nutritionist

With summer just around the corner, it's time to start thinking about how to optimize performance and comfort of livestock on summer pasture. Two of the most persistent challenges for cattle during this season include heat stress and the presence of flies.

Cattle are herd animals by nature, and their innate response to these environmental stressors is to group together. This results in increased risk of footrot and lameness, decreased feed and water intake, increased stress levels, and decreases in milk production and reproductive performance.

Implementing heat abatement strategies and controlling fly populations can help reduce these issues and contribute to a more productive grazing season.

Fly control

Flies are a major nuisance and health concern for cattle. Key species include stable flies, house flies, horn flies, and face flies. Stable flies and horn flies are both blood feeders; however, stable flies typically consume only one blood meal per day, while horn flies may consume up to 30 meals per day. Decreased feed intake, reduced weight gain, and disease issues as a result of fly pressure are estimated to cost the beef industry over \$1 billion annually.

Hubbard Feeds offers several loose mineral or low moisture block solutions containing ClariFly® feed-through fly control additives to prevent fly larvae from developing in manure. ClariFly is effective for all major fly species mentioned above. It should be provided through supplements, loose mineral, or low moisture blocks for at least 30 days prior to the start of fly season, and continued until 30 days past the first frost. These guidelines ensure that the active ingredient is present in manure when flies emerge and also minimizes the number of pupae that are able to over-winter.

For optimal results, producers should consider a multi-faceted approach and use these products in conjunction with measures such as ear tags, back rubbers and insecticide sprays.

Heat stress

It is important to understand that livestock, just like humans, are susceptible to challenges of heat and humidity. In fact, ruminants are even more susceptible, because the natural heat generated by the fermentation process in the rumen can cause them to experience heat stress at moderate temperatures. For example, cattle may begin to experience heat stress at 76 degrees if the humidity is 85% or higher.

Cattle on pasture will manage heat stress by instinctively seeking out shade and changing grazing patterns. Ensuring livestock have access to fresh, cool water is extremely important. If possible, calves should have access to separate water sources from adult animals, to ensure they get a chance to consume water. Providing shade is very helpful in reducing direct sun exposure and lowering core body temperature.

-continued on next page

BEEF SOLUTIONS

Several feed additives have also been shown to help alleviate heat stress. Capsicum is an essential oil, derived from chili peppers, that is classified as a vasodilator. Capsicum dilates blood vessels and increases blood flow to the extremities to help cattle dissipate heat. Observed benefits of feeding capsicum in scientific studies include increases in dry matter intake of 9–14%, increased water intake and increased saliva production. Researchers have also reported reduced variation in feed intake throughout the day, which helps to stabilize rumen pH and optimize microbial fermentation.

Hubbard's [Blueprint® Shade](#) mineral contains capsicum for heat stress situations, combined with the research-proven performance advantages of 100% [Bioplex®](#) trace minerals and [Sel-Plex®](#) selenium yeast. Blueprint minerals have already been proven to support cattle and calf performance in heat-stressed environments by optimizing bioavailability and helping alleviate oxidative stress. The addition of capsicum for heat stress makes Blueprint Shade the premier mineral on the market for summer grazing scenarios. It can be fed as a free-choice mineral or incorporated into a TMR.

If producers are looking for a combination product to combat both heat stress and flies, Blueprint Shade is also available in multiple formulations that contain ClariFly®.

Combined with various management strategies, these products offer a great way to increase the comfort and productivity of grazing livestock this summer. Please reach out to your Hubbard Feeds account manager or dealer for additional information.