

LARGE ANIMAL NEWSLETTER – JUNE 2001

SUMMER STRESS IS COMING

Summer will soon be upon us and with that comes the inevitable heat and humidity that is all too common with the season. Heat stress not only makes us uncomfortable, but it has a tremendous effect on dairy cows. Higher temperatures cause bacteria to replicate faster in the environment. This requires even more intense efforts by a dairyman to prevent a higher incidence of mastitis in your herd. More important are the direct effects that heat and humidity have on lactating and dry cows. As temperatures rise, dry matter intake falls and with it, so does milk production. It may surprise you to learn that heat stress has the greatest effect on your dry cows! The dry period is when animals are preparing for their upcoming lactation. Heat stress during this time can actually decrease the potential production for the lactation. Decreased dry matter intake here may result in lower calf birth weight and also dramatically increase the incidence of metabolic diseases such as milkfever, ketosis and displaced abomasums.

ACT NOW TO PREVENT IT

NOW is the time to prevent heat stress from having major effects on your herd. By having a plan in place before the hot weather arrives you can decrease your economic losses when it is actually here. Heat abatement techniques that can help you include proper barn ventilation, supplying adequate clean drinking water, using shade, installing evaporative cooling systems and keeping cows inside when the heat stress is its highest. This last suggestion will only be effective if you have proper ventilation in your buildings. If ventilation is not adequate in the barn, your cows will actually be better off outside.

Building ventilation can be natural or mechanical. If your barn is naturally ventilated make sure that you have adequate air intakes and that your ridge opening is large enough to allow proper air exchanges for hot weather months. If you are using mechanical ventilation make sure that your system is properly sized for the building and that it is in proper functioning condition. For many of our clients who have conventional barns, you may wish to consider installing tunnel ventilation. This is the use of multiple large fans placed in one end of your barn to draw air the entire length of the building. It is extremely effective if properly installed and will pay for itself by reducing production losses from heat stress.

Drinking water should be available at all times. If you are using trough waterers, there needs to be an adequate amount of trough space for the number of animals that you have. If your facilities utilize drinking cups, there needs to be one available to each cow and it must have the proper flow rate to make sure animals get the volume of water they need. The water source must also be clean so as not to discourage intake. Waterers should be cleaned at least weekly. A simple test to tell if your waterers are clean enough is to ask yourself, "If I were thirsty, would I drink from that water source?"

Shade can be a benefit to your cows, but depending on your situation may not be real practical. If your cows are on pasture, having large shade trees available to them in the summer is a definite plus. If you are considering a shaded lot, remember that the canopy must be 18-20 feet above the animals to prevent radiant heating and allow for maximum shade time as the sun passes overhead.

Evaporative cooling systems or sprinklers can greatly reduce heat stress in animals but is dependant on the water evaporating from the animal. If your animals are kept indoors and your building ventilation is not up to par, you will get a greater financial benefit from correcting air flow before installing a sprinkler system. Also keep in mind that if you use sprinklers inside your buildings, it may have an effect on your manure handling procedures.

Timing when cows go outside can be a great benefit in reducing heat stress. If you have a conventional barn and it is properly ventilated, it will most likely be in your best interest to keep your cows in during the

day when the temperature is at its maximum and let them out at night when it is cooler and there is no direct sun. If your barn ventilation is in question the animals may be better off outside under a shade canopy on hot days.

KEEPING COOL COWS MEANS COLD CASH

If you examine your farm and find you are ready for the summer heat, fantastic! If you find areas that need improvement or are not sure about your facilities, we at Grassland Veterinary Services are ready to assist you in keeping your herds heat stress to a minimum. If you elect to use any of the strategies discussed above, we can help make sure that they are implemented properly and that you get the most return for your investment. Remember, you don't want to forget about your dry cows. Having good heat stress control measures in place before the summer heat and humidity arrive will provide you with comfortable cows and higher levels in your bulk tank!!

GVS STAFF

Mike Strobush DVM
Kevin Ratka DVM
Tammy Zickert Recpt
Cindy Boh Recpt

Al Harmening DVM
Jean Liljegrn DVM
Wendy Lindner CVT

Jeff Engrav DVM
Jeannette Bymers Off Mgr
Danae Volovsek VT

