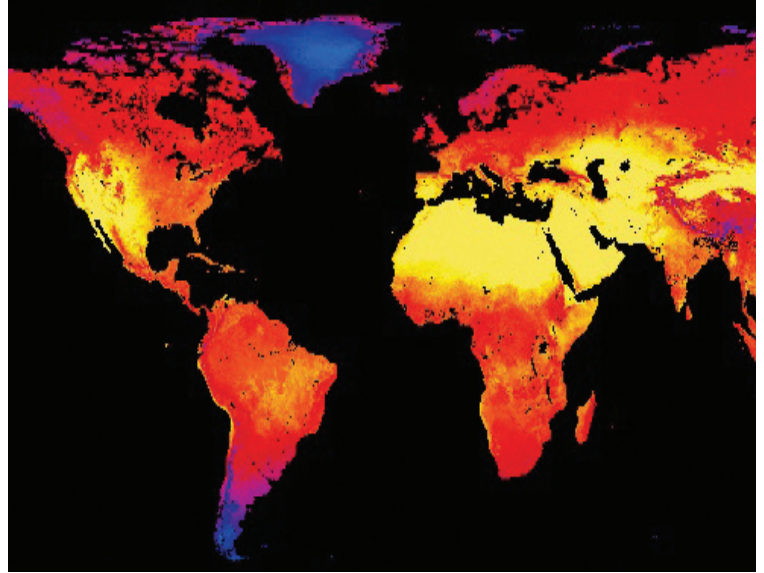


Heat Stress in Dairy Cattle

2020 marked record levels in the Temperature Humidity Index (THI) and exposed animals to more heat stress conditions than the average year; it seems this summer is no different. Yet even Darwin observed and made record of cattle being unable to get pregnant in the heat of summer.

The ideal temperature range for dairy cattle falls between 25-65 degrees Fahrenheit, with 68 degrees Fahrenheit marking initial heat stress conditions. While the 80s or 90s are typically marked as the levels when heat stress occurs, subtle stress occurs in animals long before these elevated temperatures and humid conditions.



Reduced reproduction, decreased milk yields, and poor appetite are some of the initial responses to heat stress and they only compound as the stress levels increase.

Heat stress impacts metabolism as decreased appetite leads to a negative energy balance and loss of body weight. Did you know that systematic acidosis can be caused through heat stress? P-One™ delivers **Smartbacteria** to stabilize and maintain pH, which negates acidosis and subacute rumen acidosis. Maintaining a healthy rumen and efficiently functioning gastrointestinal tract, keeps cows on track and supports high functioning metabolism to benefit cow health.

Microbiology Nutrition offers a nutrient dense ration to elevate cow health so they handle the heat. A nutrient dense ration is formulated with all the nutrition the cow needs in a much smaller package. This means that she has less mouthfuls of feed to consume to meet her calorie and nutrient needs. With a consistent schedule, the entire herd can meet their energy needs and moreover are ready for the next feeding when the mixer drives by – No warm, sloppy refusals to push out and no wasted dollars spent! For the entire herd this means less time eating, less time at the feed alley, less feed to digest, less waste/manure to excrete, and more time being able to lay to chew cud and make milk.

Producers are seeing tremendous results with Priority through the heat. Here are some of their findings from their on-farm learning as their dairies are their research-proving site.

Eduard Broeckx shares insights with Founder Richard V Breunig on the 600-cow's performance with Priority and Microbiology Nutrition at A&E Dairy in Texas:

~ more on reverse side



~ from previous side

Do the cows handle the heat better?

Eduard: Things are right on the money. If I were doing it on another ration, it'd be a disaster. With the conditions we are in now, I increase the P-One™ in the heat.

Richard: Many increase P-One™ (the microbiology) just .01lbs in the heat, that is significant.

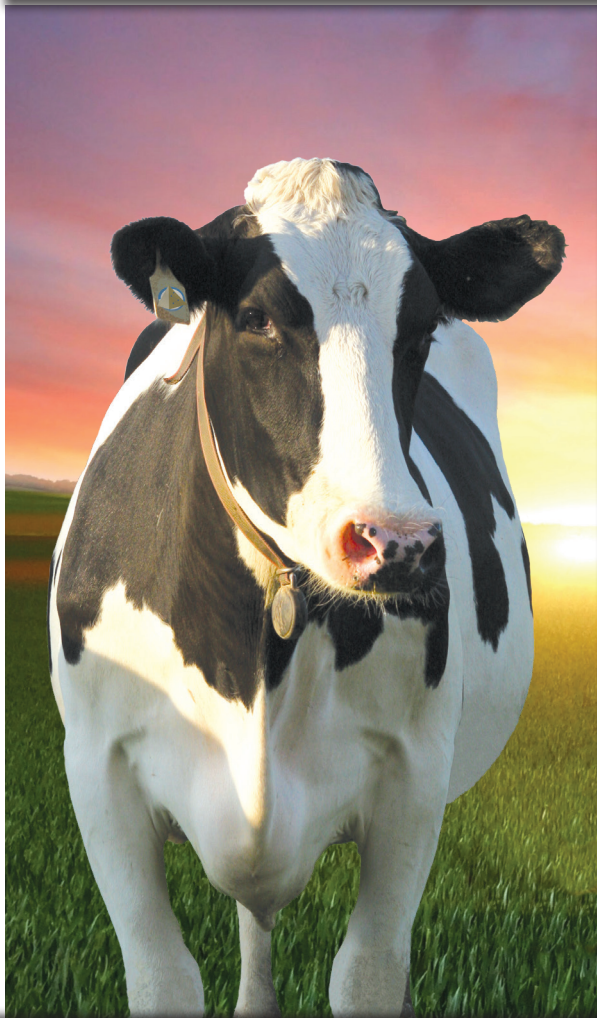
Eduard: The cows are eating really good and keep eating. They keep the same dry matter intake, 45lbs, and they keep cleaning up the feed even through the Texas heat.

The cows perform better in the hot weather. Today it's 90 and humid, but they eat the same. Maybe they eat a little slower, but everything is still cleaned up in the morning. The weather here is hot and humid, but the cows are comfortable and eat really good with the fans and soakers (sprinklers) on. They lay down, chew their cud, and they don't lose milk the components stay consistent.

I'm at a 45lb dry matter intake and am getting close to 75lbs of milk (herd is more than 50% Jerseys).

Richard: With that low of intake, did you ever think you'd be making that much milk?

Eduard: No. Even through the heat. Even with the corn silage getting warm on the second day since they dump the semi, that doesn't help in the hot weather. It's amazing.



Heat Stress Got You Down?

P-One™ Offers Solutions

P-One™ is scientifically designed to help maintain healthy rumen and gastrointestinal function. P-One™ includes yeast, enzymes to aid in breaking down fiber and branded strains of lactic acid bacteria A4000h™ and A2020™. P-One™ also contains a unique strain of Propionibacterium, which was selected for its high level of lactic acid utilization and the ability to prevent acidosis in the rumen. Working together, the ingredients in P-One™ give the producer health and production benefits by optimizing starch and fiber breakdown while helping to maintain proper rumen pH.

P-One™ helps your cows stay on feed and maintain a healthy digestive system so they can better deal with heat stress, ration changes, pen changes and the normal stresses associated with summer. Good nutrition programs should always be supported with management changes to assist in keeping animals cool.

The only company bringing the fields of
**MICROBIOLOGY &
NUTRITION TOGETHER**