It Takes Time to Recover From Heat Stress

By Charles E. Gardner, DMV

As you read this, we may still be having some hot days, with a little relief at night. But we know that cooler weather is not far away. Unfortunately, the negative effects of heat stress linger on for at least two months after the temperatures drop. I can recall many of my clients being concerned that production and reproduction were below expectations well into November and December.

There are a number of reasons for the lag between cooler weather and improved cow performance. Cows that were in later lactation when challenged by hot weather do not come back with lower temperatures. Also, cows that freshened during heat stress often get off to a poor start. If both your early lactation and late lactation cows are not milking well, it stands to reason that overall milk production will be mediocre at best. You will not be seeing high peaks and sustained strong production until cows that went through their late dry period in cooler weather begin to make up a larger portion of the herd.

Another reason for disappointing production after the return of cooler weather is that corn silage has not fully fermented on many farms. It takes at least three months for the digestibility of corn silage to reach its maximum. Until then, cows tend to eat more but produce less. Having enough corn silage to avoid feeding fresh material will negate this effect. Yet another factor is the declining day length. Longer hours of daylight have a positive effect on milk production, and the shorter days that arrive with autumn can take an additional toll.

The impact of heat stress on reproduction follows the same pattern as milk production, but it can take even longer for us to see improvement. Cows that deliver their calves under heat stress are simply not as fertile as cows that freshen in cooler conditions. So, when it comes time to breed those cows, we see below average results. Even after fertility returns, we have an additional 30 days or so until we see improvement when pregnancy checks are done.

One important take-home message is to make sure you include your dry and close-up cows with your efforts at heat relief. I remember one producer saw marked improvement in fresh cow health and performance after remodeling his close-up barn. He opened up the sidewalls, installed fans, and redid the stalls. Should you do the same at your farm? If so, this fall is the time to get started on it, so your animals will benefit next summer.

Beyond that, don’t be too hard on your nutritionist and your veterinarian when production and reproduction are disappointing in November and even December. An old maxim about dairy farming still holds true. Cows perform well in winter and spring, but struggle in summer and fall.