

## **Don't forget about the dry cows...**

Dr Kelly Fisher May 2026

With warm summer months quickly approaching, the importance of heat abatement in the dairy barn should be on every producer's mind. Although the focus tends to be on the lactating dairy cow which is no doubt important for maintaining milk production, let's not forget about the dry cows. After all, they are the immediate future of your milking herd.

Cows begin to experience heat stress when outside external temperatures exceed 25°C (77°F). For the milking cow we see very clear negative effects, including a 10-25% drop in milk production, reduced feed intakes, poorer fertility and increased risk of lameness. With dry cows, we may not have as great of an appreciation for the negative impacts of heat stress as most of these cows are out of sight out of mind until they are close to calving. Have you considered the impacts of heat stress on your dry cows?

One direct impact of heat stress on a cow during her dry period is on her udder health. Mammary gland development is divided into two stages: mammary gland regression and mammary gland redevelopment. Heat stress directly impacts these two stages, resulting in altered mammary gland tissue and decreased milk production in the subsequent lactation.

With hot weather, feed intakes can drop anywhere from 10-12% which is not ideal during the dry period. Decreased and/or inconsistent feed intake can lead to subacute rumen acidosis, increasing their risk of fresh cow diseases such as ketosis, displaced abomasum, retained placentas/metritis, etc.

Cows facing heat stress spend less time lying down, as they can more effectively dissipate heat while standing. This decrease in lying time is directly correlated with increased risk of foot health diseases such as white line, sole abscesses and sole ulcers causing significant lameness.

The impacts of heat stress stretch far beyond the dry cow herself. Dry cows experiencing heat stress are more likely to calve 2-8 days early and their offspring will have lower body weights and heights compared to offspring from dams without heat stress. In addition, these heifer calves will go on to produce less milk in future lactations due to experiencing heat stress in utero.

Stocking density in the dry cow pen is critical at all times to set them up for calving and the fresh period and especially essential during periods of heat stress. If dry cows are in housed in free stalls, there should be a 1:1 cow to stall ratio at all times. On the fullest day, each cow should have 80ft<sup>2</sup> in the far dry-off pen, 100 ft<sup>2</sup> in the close-up pen, 125 ft<sup>2</sup> in a

combined close up/calving pen and 150 ft<sup>2</sup> of bedded pack in the calving pen. These stocking densities reflect lying space and should not include the feed alley.

In the summer, the goal is to move as much air as possible. Target rate of air exchanges may vary between 40-60+ air exchanges per hour. Fan placement should be placed above feed bunks and free stalls or bedded packs to achieve air speeds of ideally 400 feet per minute. Routine fan maintenance is recommended to ensure proper air movement. Low pressure soakers or sprinklers can be used to apply droplets along the back of the cow to provide effective cooling.

Keeping appropriate feed intakes in the dry cow is critical for her transition period. During periods of heat stress, it is recommended to feed fresh feed batches more often to minimize spoilage and overheating of the feed. Hydration is critical in allowing a cow to regulate her body temperature therefore clean and easily accessible water sources should be made available. Ideally, group pens have at least two water sources.

Handling of dry cows (pen moves, vaccination, etc.) should be done early in the morning or later in the evenings when the temperature is cooler.

Cooling dry cows during their entire dry period increases milk yield in the first 30 weeks of lactation. It pays to invest in cooling systems for all cows regardless of stage of lactation . So, ask yourself what heat abatement system do I have in place for my dry cows?