BEYOND THE HELIX

SUMMER HEAT IS COSTING YOU MORE THAN YOU THINK

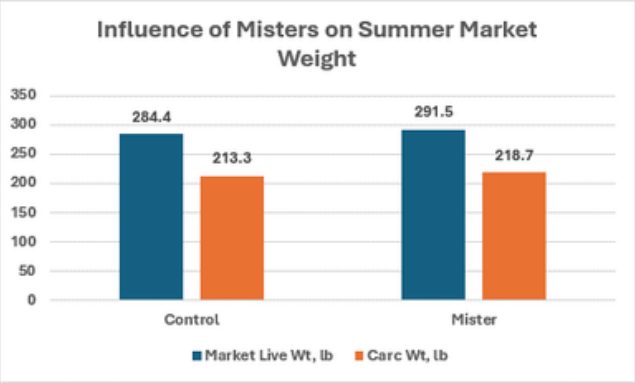
WITH DR. STEVE KITT

Summer heat doesn't just make the barn uncomfortable — it can quietly impact your performance. As temperatures climb, pigs experience physiological heat stress that can reduce feed intake, slow growth, and cut into carcass weight by the time they reach market. And during summer, when every pound counts, those losses can add up fast.

In this episode, Dr. Steve Kitt shares practical, proven strategies to help pigs stay cooler and keep performing during the hottest months of the year.

One of the most effective tools? Misters.

When managed correctly, misters are a simple, affordable way to reduce heat stress and maintain performance. A 2024 study conducted at a naturally ventilated commercial site with roughly 6,000 pigs found that misters can help recover approximately 7 pounds of live body weight and 5 pounds of carcass weight during summer marketing periods.



Why they work

Misters cool pigs through evaporative cooling. Water lands on the pig and surrounding surfaces, and as it evaporates, it removes heat from the pig's body.

But success depends on more than just adding water. For a mister system to work effectively, management is key:

- System timing – Systems should run in a way that allows pens to dry between cycles. In many barns, that means roughly 3 minutes on and 20 minutes off, though timing should be adjusted based on barn design and location.
- Temperature triggers – Misters should typically start when barn temperatures are about 15 to 18˚F above room set point.
- Pig size – Misters are often most effective around 12 weeks post-weaning, or about 140 pounds, when pigs generate more metabolic heat and become more vulnerable to summer setbacks.
- Operating hours – Because nighttime temperatures drop and evaporation slows, misters generally work best during the warmest hours of the day, often 7:00 AM to 7:00 PM.
- Droplet size – The goal is not a fine mist that raises humidity. Instead, larger droplets are more effective because they wet the pig and pen surfaces, allowing airflow and evaporation to do the cooling.

Poorly managed systems can reduce its effectiveness and do more harm than good. Wet floors, added humidity, and improper cycling reduce cooling efficiency and may create hygiene concerns.

The goal isn't just to spray water. The goal is to create the right wet-dry cycle to maximize evaporative cooling and maintain performance within your barn.

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