

With temperatures hitting the triple digits, cattle producers need to take steps to ward off heat stress in their herds, a University of Nebraska-Lincoln beef specialist said.

Cattle can begin to experience some level of heat stress when the heat index approaches 80 degrees, with most cattle being severely stressed when the heat index exceeds 100 degrees, said Terry Mader, beef specialist at UNL's Haskell Agricultural Laboratory near Concord.

Also, when early morning temperatures and/or the heat indices are in the mid-70s, chances are cattle did not adequately cool down at night, and feedlot managers should be prepared to provide as much relief to cattle as possible during the day.

Water is probably the best way to dissipate heat, Mader said.

Cattle normally take in about 5 to 8 gallons of water per day. However, when temperatures rise, that amount can double or even triple.

"It's important to have plenty of available water," he said. "When there is competition for water, it creates problems because the dominant animals will occupy waterer space and not allow other animals access."

If cattle are crowding around the watering trough, add more waterer capacity or move some of the animals to pens that will give them adequate access to water, Mader said.

In an emergency, cattle can be sprayed with water to cool them down. However, once producers do that, they need to repeat or continue spraying until the heat subsides. Spraying cattle with water will allow the animal to rapidly dissipate heat through evaporative cooling processes but this may limit the animal's ability to adapt to the heat.

If the pen surface is dry, wetting the pen also will provide relief to confined animals. It is always beneficial to start the wetting or cooling process in the morning before the cattle get too hot.

Another suggested heat stress mitigation tactic is to use bedding to decrease surface temperatures animals are exposed to, Mader said. Generally it's thought bedding is for insulation against cold stress. However, straw can aid in breaking up or diffusing the solar heat load that often contributes to heating up dry, bare ground.

The degree bedding is effective in doing this is unknown. However, if used, it is suggested bedding be placed in the pen early in the morning when the ground has cooled; otherwise, heat will be trapped in the pen surface. Also, wetting the bedding would allow for additional cooling to occur when the animal uses it.

Producers should avoid handling cattle when it's hot and never after 10 a.m. Cattle body temperatures can rise an additional 0.5 to 3.5 degrees during handling.

Cattle yards also should be free of any structures that restrict airflow. Cutting down vegetation around pens and moving cattle away from windbreaks can all help.

Building earth mounds in pens also can increase airflow by preventing cattle from bunching together. Other heat stress mitigation strategies include: providing shade, controlling biting flies and other parasites, keeping very current on cattle marketings and being mindful of heat effects on personnel as well.

For more information about managing heat stress in feedlots, consult UNL Extension NebGuide G1409, Managing Feedlot Heat Stress, available from local UNL Extension offices or on the Web at <http://www.ianrpubs.unl.edu/sendlt/g1409.pdf>.