

Public Abstract

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Department:Animal Sciences

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Title:DETERMINING BEST PREDICTORS OF ANIMAL PERFORMANCE IN FEEDLOT STEERS

Two studies were performed to determine the feasibility of predicting animal response and performance to heat stress. Studies took place at the Beef Research and Teaching Farm in summer 2011 and 2013 to replicate a real-world feedlot environment. It was found that herd core temperature can be predicted with some confidence based on ambient temperature in the near-term (within three hours). Further, it was found that ambient conditions can be used to predict herd feed intake within five days. Finally, it was found that winter coat removal early in the summer can improve animal welfare by lowering core temperature. Ultimately, equations developed for this thesis may help producers quantify animal response and improve animal welfare in feedlot settings.