ABSTRACTS * Author Presenting Paper

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Behavioral management to improve feedlot cattle performance and health. McGlone, J.J., Texas Tech University, Lubbock, USA. Feedlot cattle express complex behaviors that in the least are fascinating but in many cases are economically important. Behaviors of economic importance include, but are not limited to: feeding, drinking, behaviors during handling, patterns of elimination, dust-generating behaviors and anomalous behaviors such as bulling behaviors. This talk will focus on one important behavior as an example of how behavioral management can improve feedlot economic competitiveness. Defining feeding behavior includes recording the number of feeding bouts (meals), total time spent feeding, and total mass consumed per day and per feeding bout. Feeding behaviors in feedlots include placement of the head in the feed bunk, taking in feed (involving the lips, and tongue), chewing and swallowing. Feeding is followed by rumination behaviors, which may represent a behavioral need unique for ruminants. Feeding occurs in bouts and the measurement of feeding behavior is fraught with issues of relevance (ex., single-space feeders) vs. collection of reliable data in a commercial setting where feed intake per meal is difficult to measure. Little is reported about the genetics of feeding behavior, although based on data among breeds and from other species, a genetic component to feeding behaviors and feed intake is highly likely. Social facilitation and diurnal environmental cycles play important roles in determining group cattle feeding patterns. Management of feeding behaviors includes (a) design of the bunk to limit feed waste, (b) designing bunk quantity and quality of space to encourage or limit social behaviors during feeding, (c) use of feed additives and(or) growth promotants that may modulate feed intake, (d) changing time of feeding to affect cattle performance and dust generation, and (e) attempts to increase feed intake during times of stress (ex., arrival, heat stress, etc.). In conclusion, behavioral management and stockmanship can be applied to feeding behavior of feedlot cattle to improve cattle performance, efficiency and to minimize environmental dust. Keywords: Cattle, Behavior, Feeding.

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