

LIVESTOCK

Feed yard placement weight affects production returns

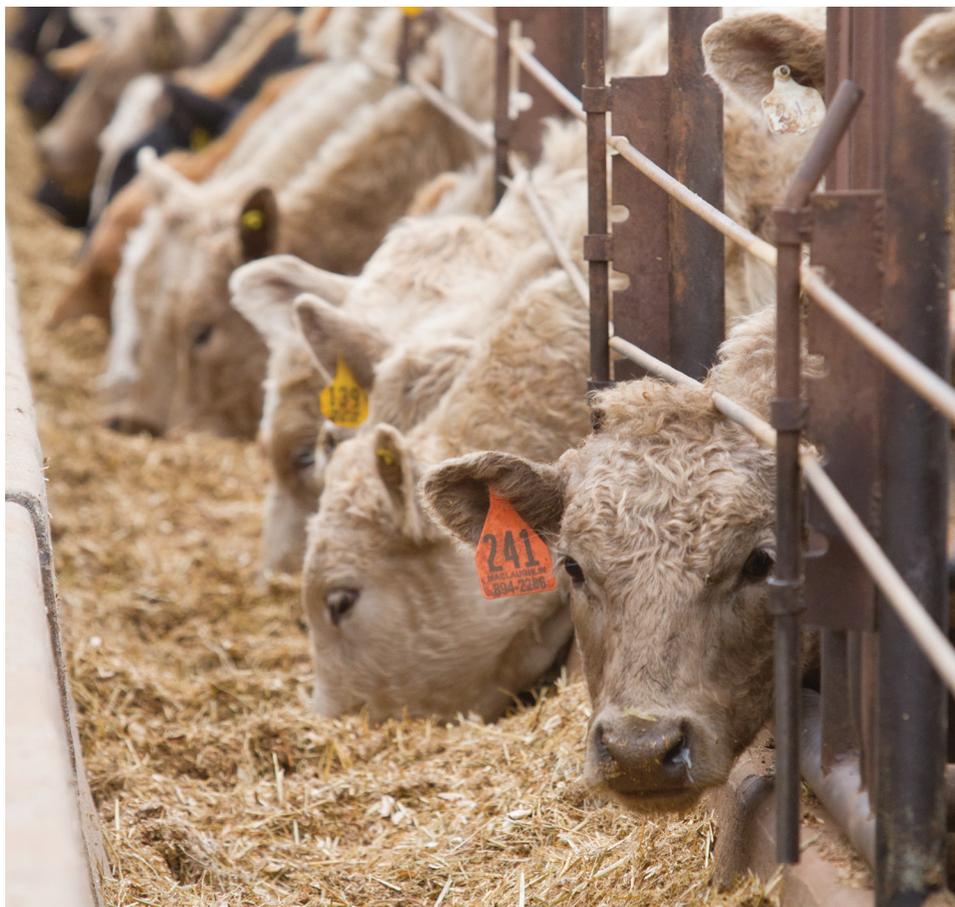
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Stocker cattle production is a major component of the cattle business in Oklahoma and Texas. Stockers are weaned calves that are typically grazed

on pasture to add 200 to 400 pounds of body weight and are then sold as a “feeder” to someone who puts the calf on feed in a feed yard. Sometimes the stocker operator may retain ownership of his stockers and feed them out himself. Whether the calves are retained by the stocker or sold to a feeder, someone is going to be interested in how those cattle perform in the feed yard and packing plant.

Recently, we (Reuter and Beck, 2013) conducted a thorough review of the scientific studies that have been published, looking for those decisions that a stocker producer makes that will affect finishing and carcass performance. We did not consider things like sex, breed, hide color or genetics because those traits are not affected by the choices a stocker producer would make. We did consider factors such as weight, average daily gain (ADG), forage type, supplementation strategies and implanting. Perhaps surprisingly, there were few examples of stocker



production decisions that affect finishing or carcass performance. One that does affect subsequent performance, however, is body weight at the time of placement on feed.

Feed yard placement weight does impact finishing and carcass performance. However, because cattle are

growing, biological beings, feed yard placement weight is typically confounded with age and previous ADG. In fact, body weight at any point is a mathematical function of age and previous ADG. Age increases every day, and, unless cattle are severely nutrient restricted, ADG is usually ►

positive. Therefore, age, previous ADG and body weight are all related (usually highly correlated), and that makes it difficult to determine which of these factors is most important.

A traditional categorization has developed in which feeders are often called either "calf-feds" or "yearlings." Yearlings are older and usually heavier, while "calf-feds" are younger and typically lighter. When yearlings are placed on feed, they have greater ADG, feed intake and carcass weights

than calves, all else being equal. Calf-feds typically have better feed efficiency, and better marbling and tenderness traits. The magnitude of these differences is variable and difficult to predict.

This relationship can have lots of implications for the beef industry. However, for a stocker, it boils down pretty simply: stocker producers should make decisions and use management strategies that maximize their net return and not worry very

much about any residual effects in the feed yard. A pretty good proof of this is that when feeder cattle are sold, either at the sale barn or in the country, there is one trait that primarily determines their value: weight. ■

Reuter, R. R., and P. A. Beck. 2013. Southern Section Interdisciplinary Beef Cattle Symposium: Carryover effects of stocker cattle systems on feedlot performance and carcass characteristics. *J. Anim. Sci.* 91:508-515.

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