Genetics, Stocker Cattle, and Process Verified Programs

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When a title starts with genetics, most producers think it must be related to the cow/calf producer, but that's not the case here. Genetics play just as much of a role in the stocker industry as they do cow/calf. Typically, most stocker producers do not know the genetic makeup of the calves that they purchase, and don't have the opportunity to use genetics to make more focused management decisions, but many stocker producers do try to select for a certain "type" of cattle. We are also beginning to see a shift in the mindset of the beef consumer who wants to know more of where their food comes from. Consumers often request products from cattle that have not been treated with hormones or antibiotics or are guaranteed to be tender. This consumer pressure may lead to more availability of and demand for cattle of known origin and genetic information. As a result, numerous companies are offering services for process verified programs for all segments of the beef industry.

A major opportunity for southeastern cattlemen is in the interaction of management with genetics during the stocker phase. For example, more growth enhancing technologies may need to be used with a set of cattle with less genetic potential for post weaning gain, but a set of high growth cattle might reach the same or superior gains without the use of these technologies. Management practices are often applied differently to each load or group of cattle, and their genetic potential should play an important role in determining how these cattle can be best managed. The impact of a management decision may last for the rest of that animal's life.

Due to the unknown genetic status of many stocker cattle, assumptions are often made as to genetics, or more specifically breed type, based on hide color or frame size. However, it is important to remember that even within a breed of purebred cattle there is significant variation in regard to potential for growth and finishing ability. Assumptions are often made based on current market trends and demands, but this may not always be correct for each individual animal.

Another important consideration when discussing stocker cattle is adaptation to environment and or region. Two examples quickly come to mind: the use of Brahman influence in Gulf Coast cow herds and adaptation to fescue. Beef producers on the Gulf Coast often take advantage of the heat tolerance and hybrid vigor of the Brahman breed in their cow herds. These cattle are well adapted to the extreme heat and humidity and insects native to the region, and producers take advantage of these traits along with the added growth and fertility from the increased hybrid vigor in both cows and calves. However, at sale time these calves are often discounted due to the negative perception of the impact on carcass quality. However, the environmental adaptability that these cattle possess may be valuable to the stocker producer grazing these calves during the summer months. Cattle will most often exhibit the best performance in the environment that they are genetically adapted, and this is an important consideration for stocker producers.

The increase in consumer requests for knowledge of where and how their food has been produced has given rise to numerous USDA Process Verified Programs (PVP) for many agricultural commodities. PVP service providers offer verification independent verification services to ensure live animals meet various requirements and standards depending on the program. The scope of these programs range from age and source verification to cattle to third party verification that cattle have not been implanted. There is even a Beef Quality Assurance

Verified Program. These verified programs are provided by various companies in all segments of the beef industry such as breed associations, semen suppliers, and meat packers. Producers enrolling cattle in these programs often use the verification as a marketing tool to receive premiums for groups of cattle whether marketed from the farm or through sales.

Age and source verification programs are the most prevalent process verified point, and simply verify the source (farm or ranch) and provide group age information for a load of cattle. Non-hormone treated programs (NHTC) verify that cattle have not received a hormone typically from a growth implant. Several programs provide product traceability and tracking information or health program verification. Some verification programs provide detail on the DNA for parentage verification or management purposes. A program called Never Ever 3 (NE3) has recently been introduced. To qualify for this program, cattle, are verified to have never been treated with or fed antibiotics, never been administered growth hormones, and never fed any animal by-products.

There are numerous opportunities available for stocker producers to take advantage of both genetics and process verified programs. Both can be tailored very specifically to a producer's goals and the operation's needs as well as location. Both genetics and process verified programs can serve as a valuable marketing tool for stocker producers in Mississippi.

For more information about beef cattle production, contact an office of the Mississippi State University Extension Service, and visit msucares.com/livestock/beef.

References:

Official Listing of Approved USDA Process Verified Programs. https://www.ams.usda.gov/sites/default/files/media/Official%20ListingPVP.pdf. Accessed 9/14/18

Official Listing of Approved USDA Process Verified Programs for Service Providers. https://www.ams.usda.gov/sites/default/files/media/Official%20Listing%20of%20Approved%20Process%20Verified%20Programs%20for%20Sevice%20Providers.pdfAccessed 9/14/18

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