

# Central Tests, Part III: Responsibilities of performance-testing programs

*We asked Dr. Nichols, beef cattle specialist, from the University of Kentucky Cooperative Extension Service at Lexington, to provide us with her impressions of on-farm testing. Producers in the state of Kentucky can take advantage of an active statewide program of on-farm testing. Or, they can send entries to the Kentucky Central Bull Test Station at Eden Shale Farm near Owenton, a facility Dr. Nichols manages. Dr. Nichols has pioneered beyond traditional female roles in agriculture and beef production and maintains an increasingly full calendar in 4-H work, radio and television presentations, teaching (three classes), and extension. She also has a six-month schedule of show judging ahead in Texas, Illinois, Ohio, Tennessee, Indiana and Kentucky. Her husband, Gary, is a field representative for the American Polled Hereford Assn., and they have two sons, Cameron, 3, and Drew, 7.*

*In response to our questionnaire, Dr. Nichols chose to expand the categories and address some of the future issues facing testing. Consequently her presentation provides a summary of this three-part series. Parts I and II appeared in the March and April, 1988, issues.*

**By Dr. Carla Gale Nichols, University of Kentucky Beef Extension Specialist, Lexington, Kentucky**

Performance-testing programs have evolved to sophistication, starting from humble beginnings in the 1930s with simple "weigh and record" techniques to the EPD system for all registered animals. We in the beef cattle business have had an education "blitz" on performance programs over the last 10 years that has molded our attitudes, breeding programs, and types of cattle produced. Exactly where has all this education taken us and in what directions are breeding cattle headed?

First we must recognize the changing roles and responsibilities of performance-testing programs. In the past, universities, through the Cooperative Extension Service, have initiated and carried out "PT" programs. Now purebred associations' performance-testing programs have surpassed university purebred programs in terms of quality and information available to the breeders. Every cattleman involved in the production of seedstock should participate in their respective breed association recordkeeping system. This involvement aids not only each individual breeding program but improves records and accuracy for the entire breed's testing program. Where does this shift of responsibilities leave the universities?

Universities must now emphasize development of performance programs that benefit in management decisions and record-keeping for the commercial cow herd. These systems must go beyond recording of weights and measurements and expand to economic inputs, reproduction management, options for marketing, and tracking of animals to endpoint.

## The role of the breed associations

Purebred associations must continue to offer the "top-of-the-line" testing programs and sire evaluation to all breeders. Numbers of breeders participating in these programs must increase dramatically. Although the cost of testing programs is huge, data collected and information gained is crucial to each breed if they are to survive and have major impact on the U.S. beef cattle industry. Breed associations need to do a more complete job of "merchandising" their performance programs. Field staff should also be rewarded for number of new herds placed on performance programs, number of weaning weights processed, or some other comparable measure for inspiring their promotion of performance.

Each association must make a conscious effort to evaluate where the breed fits the industry, then actively pursue and develop the commercial market in that particular area. The long distance between top-of-the-line purebred producer, everyday commercial cattleman, and the consuming public must be shortened, and specific performance goals are essential to accomplish this intent. Without performance records, it's difficult to change a breeding program to meet consumer needs.

## What is "testing," anyway?

We must examine what is meant by "performance program or testing." It can be as simple as a commercial producer utilizing records to evaluate and purchase a herd sire to extremely complex systems, utilizing all available information from sire summaries, EPD, and in-herd data to management and financial records. All this information makes the cattle industry more of a business.

Relating performance to commercial cattle producers has become a major thrust for the agricultural universities. Most colleges have turned their attention to development of programs to benefit commercial breeders.

There have been two major changes in our commercial bull buyers over the past few years. First, these buyers KNOW what they want in breeding stock in terms of performance information and breeding soundness evaluation. A larger percentage of buyers understand and USE performance information in buying decisions. Secondly, these buyers have less time so they are unwilling to spend hours or days or weeks looking from farm to farm (or ranch to ranch!) for the breeding stock they desire.

It's easier to attend a consignment sale of performance-tested bulls, find the type they wish to purchase, and buy those bulls at the sale. If they are unsuccessful in purchasing at the sale, the potential buyers know which breeders they need to call, based upon what they have seen at the sale. This is where the credibility associated with university testing programs plays a crucial role. The university programs bridge the gap between purebred and commercial producers to put them in touch with each other on common ground.

## What about testing on the farm?

Central bull test programs and on-farm testing programs both contribute to bringing seedstock and commercial producers together through the university programs. Both also benefit the purebred breed associations as well. On-farm testing of young

bulls allows the breeder to maintain complete contemporary groups, making a more meaningful test of the individuals involved. This also gives more meaningful data to the breed association. The Kentucky on-farm testing programs have grown over the past few years, due to an increased interest in local and area beef associations coupled with input from the Cooperative Extension Service. Several new yearling bull sales have grown out of this interest, with all records recorded on a within-herd, on-farm basis. Several items have contributed to this renewed attention for performance testing: 1) commercial bull buyers are demanding performance information on breeding stock they purchase; 2) the cost of central testing is quite high; 3) producers wish to develop local markets with new buyers that traditional marketing techniques cannot reach.

The value of on-farm testing is two-fold if coupled with some type of merchandising program. Normally, if merchandising is in cooperation with a university, it offers “more buyer confidence” in the product offered. If the on-farm tested program is conducted correctly and with integrity, records are accurate and reliable, but are difficult to compare in a consignment sale across herds due to differences in feeding and management programs. The availability of EPD on individual animals aids in across-herd comparisons to a degree, but accuracy figures are quite low on yearling cattle.

Buyers need to evaluate herd averages on various traits and feeding programs when evaluating records from an on-farm test. In Kentucky, our on-farm testing for consignment sales requires a certification by the county agent of actual yearling weight to add credibility, or several measurements may be taken prior to sale such as weights, hip height, and scrotal measurements and given to potential buyers. Breeding soundness evaluation is often a requirement for consignment, and several of our newer sales involve on-farm screening of cattle to assure high-quality consignments.

Since more purebred breeders are opting for testing their entire contemporary group on the home farm and sending less bulls to the central test stations, the quality of bulls offered through these on-farm programs are worth a premium price, especially the top individuals.

The outlook for central testing

The future of central testing programs is more difficult to predict. It will still have a place for many of the smaller-scale purebred breeders to send top calves to benefit from a larger post-weaning test contemporary group. But perhaps more importantly, central tests are an excellent showcase for performance records and merchandising tool to commercial bull buyers. Many of these commercial bull buyers have come to rely upon the central test station as an excellent source of top young herd bull prospects. The emphasis needs to expand from just growth traits to the “total bull concept” in education and merchandising. Although the “total bull” involves several traits that test stations may not or cannot measure, such as birth weight, EPD, milking ability, etc., these traits must also be emphasized.

Have central tests and the showing conspired?

Many folks have totally blamed the showing for over-accentuating a particular trait and going totally overboard with it such as frame score. The performance gain test has also done the same thing with selection for extreme rates of gain without regard to other traits.

Single-trait selection is always dangerous because of undesirable genetic and phenotypic correlations with other economically important traits. Selection solely on frame score has led to cattle without muscle, cattle with numerous structural problems, cattle with calving difficulty, cattle that are “hard-doers,” and later-maturing cattle with less milk. Selection solely toward post-weaning gain leads to cattle with high birth weights, cattle that are later maturing, cattle with less milk, cattle with increased frame and also several structural problems. Note the similarity of results.

The key has always been to optimize several traits and not to over-stress any of them. For the central bull test, this will mean reorganizing test results to accentuate the “all-around bull” and stress every herd has different needs in their herd sires. Most buyers are already doing this as reflected in individual prices paid for central test bulls at auction, regardless of sale order position. The good ones always sell well, even if they sell last.

### **The effects can be far reaching**

Comments by several of our Kentucky stockyards people that attend our performance-tested sales accent the impact of high-quality bulls on the commercial feeder cattle industry. They realize calves sired by these high-quality, performance-tested bulls will outperform most cattle through the yards on any given day. Most hope to see those cattle pass through their establishment a few years later but realize there is still a large amount of education to instill in producers. One yard’s owner commented he knew at least a dozen cattlemen who just bought bulls through the yards that were “cow fresheners” and paid around \$1,000 each for “just a bull.” Those are the fellows we need to reach.

One idea to promote tested bulls to feeder cattle producers is a form of bull leasing. If a bank, stockyards, or other institution will purchase top bulls, lease them to producers for two years, then sell the first calf crop at the yards followed by sale of the bull, several plusses can result: 1) the producer has more “bull power” than he would have purchased and it pays back in terms of added pounds and quality in his calves; 2) the bank will be close to payback on pound price of the bull from the yards sale, will have the added benefit of additional income by the farmer to pay on loans, and the big plus of positive public relations for agriculture; 3) the yards will benefit by having higher-quality cattle through their sales, more commission if the cattle command a premium, and good “P.R.” for themselves; 4) for us in performance testing, the best tool of education-learning by doing and seeing the results first hand.

### **Predictable steers means more predictable sires**

Programs along these lines can also expand the possibility of identifying sires and breeds into the feeding and packing industries with larger numbers of sires and total head of cattle represented. This would increase potential for sire evaluation of feedlot and carcass traits.

The challenges of performance programs of tomorrow are to tie seedstock selection to the commercial cattle industry. Purebred breeders always hope to have those few highselling, extraordinary calves produced from their herds, but they realize their mainstay is the commercial bull buyer market. Our trial as seedstock producers is to stay practical and in touch with industry changes and needs. Performance programs, through breed associations or universities, are tools to aid us in achieving that goal.