

OKLAHOMA BEEF, INC.

by Nancy Ann Sayre □

Meeting the Need for Improved Genetics

Annual beef production is the largest single source of agricultural income generated in Oklahoma. It is only natural then that purebred cattlemen in a state so dependent on beef should take an aggressive approach in breeding and testing cattle.

The Oklahoma BEEF, Inc. (OBI) bull test station at Oklahoma State University is a unique example of efforts by interested breeders to improve both the genetics of their seed stock and the awareness of genetic principles. OBI is a non-profit organization supervised by the university, but owned and governed by the breeders themselves.

OBI was founded in June, 1973 by 25 Angus breeders and 26 Hereford breeders sincere in their interest to improve the quality of beef cattle in Oklahoma. Identification of genetically superior seed stock was the purpose that brought them together; the means for this was a bull test station for producers of purebred beef bulls.

The idea was spawned—cattlemen realized a need to evaluate, promote and advance the performance of potential herd sires; the university was interested from educational and cooperative standpoints. And Oklahoma BEEF, Inc. was formed.

A combination of ideas, finances and resources from purebred producers and state university personnel has since encouraged maximum use of 140-day teed testing to evaluate genetic differences in yearling bulls through their performance—at a time when performance information is becoming more widely accepted and used in today's beef industry.

Planning a central bull test station was not an idea singular to Oklahoma breeders, and the state university was perhaps a logical place to get started. However, the initiative and continued interest taken by these Oklahoma breeders set this test station apart from

others. The breeders own and govern the test station; it exists only because they recognized a need for it. Financial and managerial involvement in the program has kept these cattlemen closely tied to progress and success at OBI.

Owned by Breeders

When the articles of incorporation were signed, each of the 51 Angus and Hereford breeders purchased memberships and those membership fees helped finance buildings and facilities. The university extension ser-

The Angus facilities have the capacity now to test nearly 300 bulls a year. OBI membership includes some 40 Angus breeders.

Design and layout of the sheds, pens, sale barn, waste lagoons, corrals and lots combine ideas of breed committees and university personnel. They are practical and functional by design; situated with flexibility for additions and expansion. The land is owned by the university and leased to OBI on a 99-year basis.

Dr. T.D. "Dusty" Rich (currently executive secretary of the American Polled Hereford

Assn.) worked closely with the OBI members from the start of the project through October, 1979. Since that time, Dr. Charles McPeake has managed the test station as extension beef cattle breeding specialist and executive secretary of OBI; "on loan from Oklahoma State University."

The test station provides an opportunity for the extension service to be in close contact with nearly 200 consignors involved with the test annually; they are able to reach interested buyers and visitors as well. Thus, provision of a supervisor and information to OBI serves the goals and purposes of the state extension service well.

Jim Thompson, a full-time employee for the last four years, is hired by OBI. He lives on the test premises and works with McPeake, handling the day to day management. Six students at Oklahoma State University are also employed on a part-time basis.

Feeding, health precautions, pen maintenance and other daily chores are vital to the success of the tests conducted at OBI. Bulls need to be healthy and the environment must be conducive to their maximum growth if genetic potentials are to be expressed. McPeake appreciates the excellent help at OBI-dependable men, their conscientious "eyes" and good facilities help keep the tests meaningful and accurate.

BULL TEST STATION

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vice and animal science department supplied the land, executive secretary and other resource personnel. The wheels were in motion and by 1974 the first bulls were on test. (The first Angus test began August 16, 1914.)

Angus breeders involved in the initial planning of OBI included: Carlton Corbin, Bob Hartley, J.O. Pharoah, G.C. Richardson, Howard Harrington, Charles Richards and Bill Bedingfield.

In fact, Bedingfield was contracted to construct the buildings at OBI. Dr. J.C. Hillier of Oklahoma State University also had a vital role in the planning.

OBI now includes five breeds of cattle. Polled Hereford breeders followed after the Angus and Hereford, starting their test in 1976. Charolais and Brangus joined later.

Run by Breeders

Rules and regulations for each test are determined by respective breed test committees. Participating members of each breed select five breeders to work with McPeake a other university personnel as their test committee. Rations for the bulls, test dates and regulations, indexes, sale plans and other decisions are made by these committees for each breed and test barn.

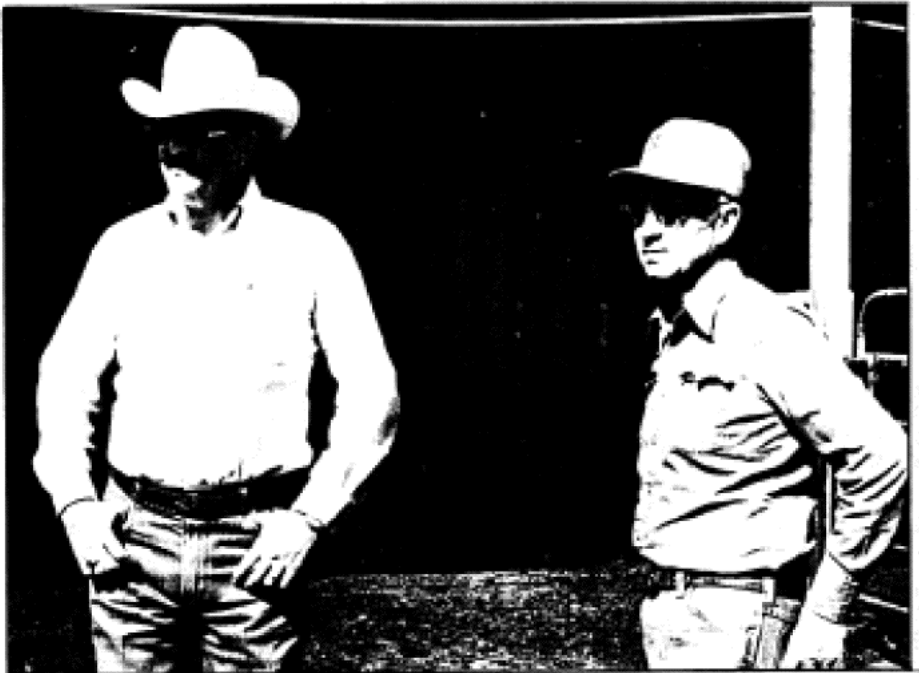
Since each participating breed financed and built their own barns and pens, there are some differences between facilities as well as test rules. For example, pen size varies (Angus are grouped in pens of 10 to 15 head, while some breeds are in larger lots of 25 head); feeding systems include self-feeders and fence-line bunks (Angus are on self-feeders); ventilation and cooling setups differ between barns. Basically though, the tests are comparable and easily managed together. However, no two breeds are ever compared; rations are restricted to withinbreed contemporary test groups.

Tests for Angus bulls are set up to begin every month, except during summer when tests cover two-month intervals. The 214 Angus bulls fed in 1981 were divided by age into 10 contemporary groups. Under this design, each bull comes off test within a month of his first birthday. This practice originated with the start of the OBI station; participating breeders feel the data are more meaningful. They believe the benefits of more accurate yearling adjustments offset the decrease in number of contemporaries for comparison and any additional labor involved with running a greater number of smaller test groups.

Bulls entering the test at OBI are started on a 24-hour full feed of prairie hay the day they arrive at the center. A warm-up period lasts two weeks and during that time a high-roughage ration is gradually changed to a higher energy, more concentrated feed. The Angus ration (one of two different feeds used at OBI) is a cracked corn base with oats, pelleted corn cob, cottonseed meal and soybean meal, fat and antibiotics; protein level is approximately 13.5%.

Identifying Superior Performers

Cattle are weighed and measured after the warm-up period for the official test start. Birth date and sire information are also recorded at the start. Bulls are then weighed every 28



Dr. Charles McPeake, (left) extension beef cattle breeding specialist at OSU and executive secretary of Oklahoma BEEF, Inc., manages the bull test station with help of Jim Thompson (right). These men work in cooperation with the Oklahoma breeders who actually own and govern this unique bull test.

days and gain information is sent to all consignors on a monthly basis. After 140 days, bulls are weighed off (this weight is the average of weights taken the day before and after the test ends). Hip height is taken again and adjusted to 365 days; a scanogram measurement yields back fat and rib information.

Similar information is gathered on all bulls tested, but each breed uses different coefficients to compute an index for ranking performance. Angus are compared on the basis of average daily gain, weight per day of age and adjusted yearling weight. A calculated index established by the test committee puts emphasis, on performance in each of these categories.

Hip height and other measurements are published and available for interested breeders to analyze. All information is kept current during the test and posted in the test barn; McPeake and Thompson list data on a chalkboard located by each pen. This makes it easy to see just how any individual is performing as the test proceeds.

And McPeake would like to see even more information made available. For instance, at this point little weaning data are published on Angus entries; McPeake also hopes to see breeders and buyers alike require breeding value figures.

Other plans for the future at OBI? Possible expansion, perhaps the inclusion of other breeds. This growth has been limited by original regulations limiting the test to purebreds. However, if there is a demand to test other breeds, every effort will be made to meet that need.

Non-members in, and out-of-state) are encouraged to participate in OBI's test, providing there is sufficient space. Angus facilities have been filled, but since that time the

Angus barn has been expanded by four pens (in the summer of 1980). Non-members pay OBI a test fee of \$150 per bull plus all feed and vet expenses (members pay a reduced fee of \$100 and they also have voting privileges in test management decisions). All expenses incurred-by the test (including upkeep, equipment, fly control, other overhead and labor, except McPeake's extension work) are covered by the fees paid to OBI.

Angus breeders host two sales a year-spring and fall. Polled Hereford and Hereford consignors also hold a spring sale; Brangus breeders have an annual fall sale. After completing a test, bulls are taken home and may be returned for the respective breed sale if they index in the top 70% of their contemporary group.

McPeake estimates that 35% of the bulls tested sell through OBI tests-many are sold at private treaty by consignors and top performers are often retained by breeders as herd sires. It seems clear that participants use the test more for the performance information than strictly as a sale outlet.

Results Used by Breeders and Buyers

Identification of genetically superior animals and advancement in performance were the founding ideas for OBI. And McPeake has no doubt that progress is being made. He can see improvements since he started just three years ago.

"I think the utilization of A.I. and the use of sire summaries in selecting those AI sires has had a positive effect on the quality of Angus bulls being tested here . . . use of embryo transfer, too. It sure has improved the Angus cattle in Oklahoma as a whole and we are seeing the results of that change right here."

"You better believe that if you've got some performance bulls that will add dollars to the pocket of those commercial cattlemen, they'll be in here buying..."

Promotion was an important part of the reason for OBI, as well, and the organization seems to be filling that role. Visitors come to study the bulls, see the test facilities and learn about the unique organization. And breeders coming in to check on the performance of bulls in one breed's barn often mill through other barns, too.

Africa, Australia and other foreign countries as well"

As for customers, McPeake is positive when he discusses their knowledge, observations and requirements, too.

"They study the figures that are available, but they still have to look at the animals, too. Good commercial breeders have an idea of



Exposure is important in marketing cattle and this well-run station helps to promote the bulls tested there-an added benefit to knowledge gained about genetic potentials of animals on test.

"I like to think of the Angus barn here as a kind of show place for breeders in Oklahoma," says McPeake. "I think it works really well to represent them"

"We get many, many visitors through here-extension groups, judging teams. Block and Bridle Clubs, interested breeders from all over the country In fact, we have some visitors from South America.

what performance testing can measure, the meaning behind the figures and what selecting the better bulls can do for them

"And our better bulls go to top commercial people Many are repeat buyers you 've got to have those people to survive

"Sure, there are breeders with a few head of cattle that will to anything-some will spend huge sums of money for a bull they know very little about, others will breed to anything as long as it's cheap but they're not in the cattle business for economic reasons not really In all honesty, we don't have too many of those thank good-

Geared for Cattlemen

McPeake may see a problem in the purebred industry with breeders using highly promoted, yet unproven bulls, but his program at OBI is oriented towards the committed Oklahoma cattlemen-men interested in the beef business and in improvement of their herd and breed. These breeders recognize the value of comparing bulls under a uniform environment and selecting those that excel in growth. With these cattlemen in mind, the program at OBI is in line with industry needs; this makes the information collected and used both important and marketable.

McPeake feels that the economics of growth-the value of identifying and using those bulls with the ability to gain faster and pass that rapid growth on to their calves-is the key.

"We must look primarily at yearling weights. If a tested bull can increase yearling weights of a calf crop by an average of 10 lb. for 3 or 4 years, he's worth some extra money."

"And you better believe that if you've got some performance bulls that will add dollars to the pocket of those commercial cattlemen, they'll be in here buying or finding out where the top performers came from."

Oklahoma BEEF, Inc. was designed to meet the needs of these cattle folks-it was started by breeders and is owned by breed-

McPeake and Thompson study some differences among bulls on test at OBI. Breeders, buyers and OBI visitors alike use the figures posted on chalkboards at each test pen to analyze current performance data and compare bulls throughout the 140-day test period.

ers. These breeders are after superior genetics and they are making progress.

Proof lives in the high number of repeat consignors and customers. The test is popular state-wide and has drawn interest from across the country as well. 697 bulls completed test in 1981, compared to 284 the first year.

OBI exists only because breeders in the state recognized a need. They use the performance information for selection and marketing in a state where beef production is of major importance, this joint venture between purebred cattlemen and the state university is meeting the need.