

New role for linear measurements

The American Breeders Service (ABS) introduced its linear trait evaluation program at the Beef Improvement Federation 20th annual meeting held in Albuquerque, N.M., mid-May. The company labels its new program Beef Genetic Trait Summary or GTS.

Impetus for a linear component of sire evaluation came from the field, according to ABS spokesmen.

"It was developed in cooperation with cattlemen. Beef GTS will be for producers with specific breeding goals in mind," explains Keith Vander Velde, manager, Beef Programs for ABS. "It will answer a lot of the producer questions we get on a day-to-day basis."

Linear trait evaluation will provide cattlemen with an accurate picture of what a bull's offspring will look like. "It will provide the same type of objective measurement for type traits that we utilize with EPD for birth weight, weaning weight, and calving ease," says Todd Charnetzki, manager, Genetic Mating Service. "It's not designed to tell you which cattle are good or bad, but rather what the cattle look like. Then you need to make your breeding decision from there."

Since there are many "ideal" body types people select for, ABS' linear evaluation system for type is intended to be useful in sire selection because it objectively describes how animals appear without dictating an idea of best. Based on a 50 point scale, with 25 being the mean, traits are scored from one biological extreme to the other with little or no judgment placed on each trait's desirability.

"We're not trying to set any standards, we're trying to do a better job of describing animals," stresses Vander Velde. This will be done through the linear evaluation of 10 primary type traits—three udder traits and seven body traits. The program also includes the use of nine miscellaneous codes for characteristics such as eye

pigmentation and disposition. In the early phase of this program, these characteristics will be evaluated further to determine if differences between bulls can be accurately identified.

Trained evaluators will assess

With experience in evaluating and summarizing linear information for almost 6 million dairy cows, ABS has the technology and the practice to adopt a linear program for beef. Trained evaluators will gather the data from animals. "We are doing a third party evaluation," explains Charnetzki. "The sires of the animals are not known or identified until after the evaluation is made."

Initially the program will include the Angus, Horned and Polled Hereford, and Simmental breeds. According to Vander Velde, "This is a new generation for beef cattle improvement and evaluation. Linear trait evaluation is designed to provide a better quality product where people will have a higher accuracy for what they are using and which meets their demands. It doesn't take the place of EPD's, it just supplements them."

Udder traits

Udder attachment. Combines fore udder, rear udder height and rear udder width to describe strength and length of attachments. Projected at peak lactation.

Udder depth. Measures actual depth of udder from top of fore udder to udder floor.

Teat size. Average teat size is 25. Injured teats are not coded.

Body traits

Stature. Actual height at the hip. A change of one inch equals approximately five points. Average stature for primary breeds are: Simmental, 52 inches; Angus, 48 inches; Hereford, 49 inches.

Femininity. Visual assessment of an individual's ability to produce and carry weight without becoming coarse or more masculine. Low end of scale—masculine. High end—feminine.

Capacity. Combines depth and width of fore and rear rib along with spring and length of rib.

Body length. Visual length from withers to pins.

Muscling. Primary source of this score is a rear view with emphasis on the width of rump and hindquarter.

Rear leg set. Evaluated from a side view, animals with correct set are coded a 25.

Feet and pasterns. A composite trait; combines length and strength of pastern and foot angle.

Male traits

Sheath scores. Length and angle of sheath.

Scrotal circumference. Actual measurements taken on bulls off test.

Miscellaneous codes

The miscellaneous codes to be indicated on the evaluation worksheet include:

1. Pigmentation of each eye
2. Disposition
3. Front-end alignment
4. Rear-leg alignment
5. Scrotal/udder pigmentation
6. Scurs
7. Off color (excessive white)

For more information on the Beef linear evaluation program:

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