

# BY THE NUMBERS

by Esther McCabe, performance programs

## AHIR Program Updates

*Changes to Angus Herd Improvement Records program contribute to weekly EPD predictions for registered Angus cattle.*

In 1957, the Angus Herd Improvement Records (AHIR®) program was initiated. This was also the year when the Soviet Union successfully launched Sputnik into space and caused the space race to begin; ultrasound scanning was pioneered in Scotland; and Elvis Presley released “Jailhouse Rock” and “All Shook Up”.

A lot has changed since then. There is buzz about the first civilian making a trip to space in the not-so-distant future, and ultrasound scanning has become a routine practice, not only for pregnant women but for our livestock species as well.

The improvements accomplished in the Angus herd during the last 64 years are no doubt a result of the AHIR program and the dedication from our Angus breeders. As we look toward the next 64 years of AHIR, it is hard to imagine what improvements will be accomplished. The American Angus Association has recently made some additions and updates in the program.

### Teat size and udder suspension scores

Quality teat and udder conformation are essential to a productive female. Poor teat or udder quality lowers herd productivity and provides opportunity to cull females.



Newborn calves rely on colostrum to provide passive immunity until the calf’s immune system begins to take over. If the newborn calf is unable to successfully suckle because of poor teat or udder quality, it not only compromises colostrum intake but also increases labor to assist the calf in nursing or to milk out the udder.

Research shows udder characteristics are heritable, and improvement can be made with selection pressure. With the recording of teat size and udder

suspension scores, the goal is to work toward a research expected progeny difference (EPD) for each trait once sufficient numbers of scores are submitted by membership.

Following the scoring system from the Beef Improvement Federation (BIF), teat size and udder suspension are scored on a 1-to-9 scale. A teat size score of 1 represents a very large, misshapen teat, and a score of 9 represents a very small teat. For udder suspension, a score of 1 represents a very pendulous udder, and a score of 9 represents a very tight udder held close to the body cavity.

While teat size and udder suspension are correlated, they are considered two separate traits. Much like collecting foot scores, teat size and udder suspension must be scored on the weakest combined quarter of the udder. While these scores are recorded on the combined worst quarter, each trait should be scored independently.

Dams should be scored annually without consideration for age. These scores should be recorded within 24 hours of calving, ideally before the calf has suckled.

For consistency, it is best if the same person scores all females in a management group. These scores can be collected at the same time as calving ease and birth weight.

Members using Angus Information Management Software (AIMS) have been able to record teat size and udder suspension scores. While the scores in AIMS are recorded on a different scale, those scores can be converted to the 1-to-9 scale. Once AIMS has been updated to be able to convert to the 1-to-9 scales, the Association will be reaching out to AIMS users who want to submit historical teat size and udder suspension scores.

## Updated disposal codes

As you keep record of your herd inventory, you will notice disposal code lists have been updated and more detail can be provided. As we work toward characterizing sustained cow fertility, recording why animals leave the herd helps provide necessary information. There is an updated disposal code list for each animal type including birth, weaning, yearling, cows and bulls. How disposal codes are submitted has not changed, but the list is more encompassing of potential reasons animals leave the herd.

When disposing of an animal from inventory, you can select either a main category reason or select a more detailed reason from the list.

For example, if you culled an animal from the herd because of a drought, you can either select “Culled — Weather Event” or provide more detailed records under the category and select “Drought.”

If an animal was culled because of feet issues, you can select the main category of “Culled — Feet,” or if you know the specific issue was long toes,

you can select “Long Toes” under the main category of “Culled — Feet.”

## Weaning docility scores

Docility scores can now be submitted on weaning-age animals. Until now, the youngest age that docility scores were recorded was yearling. Weaning is a stressful event, therefore the utility of weaning docility scores in a genetic evaluation is still debated.

However, it is known members remove animals from the herd at weaning, eliminating the opportunity to record a docility score for that animal. This potentially leads to a bias in the genetic evaluation. Once enough weaning scores are recorded, the scores can be evaluated to determine the efficacy of using these scores in the genetic evaluation for temperament.

## Reproductive tract scores

One additional piece of information able to be recorded is reproductive tract scores (RTS) on yearling age heifers. Reproductive tract scores are used to indicate the readiness of a heifer for breeding. These scores are usually collected during prebreeding evaluations for yearling-age heifers, often at the same time as pelvic measurements.

## Phenotypic traits

You may notice an addition to the bottom of the EPDs when searching animals on EPD/Pedigree Lookup. Phenotypic data is valuable, as is genomic testing, and we want to recognize those members committed to data collection.

Listed under the EPDs is a section called “Phenotypic Traits.” This list includes those traits that have phenotypes submitted for that animal. For example, if an animal had


phenotypes for birth weight, weaning weight, yearling docility score, foot claw set and foot angle recorded, the Phenotypic Traits list would include BW, WW, Doc, Claw and Angle.

## Lunch and Learn

Through Angus University, there will be a series of AHIR Lunch and Learn webinars during August. The webinars are designed to provide the opportunity to learn information in a more in-depth, hands-on approach while addressing frequently asked questions.

These sessions are hosted Tuesdays at noon CDT, and will last 20-30 minutes with 10-15 minutes of questions from the audience. Join us Aug. 17 to learn more about Foot Scoring, Aug. 24 for Teat and Udder Scoring, and Aug. 31 for collecting body condition scores. If you are unable to attend but are interested in the recording of the session, contact the Association.

## Summary

There have been many updates and additions to AHIR since the program was initiated 64 years ago. These changes have contributed to our weekly National Cattle Evaluation (NCE), which predicts EPDs for registered Angus cattle. It is exciting to imagine the progress that will be made the next six decades. 

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*Editor's note: For questions regarding updates to AHIR®, please contact the Association at (816) 383-5100 or by emailing emccabe@angus.org.*