By the Numbers

▶ by **Kelli Retallick,** *AGI director of genetic service*

Gearing up for yearling collection

For many spring-calving herds, producers are getting geared up for the 2017 calving season. However, before those new babies hit the ground, key data collection points on yearling bulls and developing females can be collected. Many different expected progeny difference (EPD) values use these various yearling measures. It is important that this information is collected in the best manner in order for more accurate predictions of genetic merit.

Creating contemporary groups

Correct contemporary grouping is crucial in order to ensure data reported can be accepted for national cattle evaluation (NCE).

The number of animals in a yearling contemporary group will never be larger than the number of animals included in contemporary groups established at weaning time. This means, for instance, if one individual was removed from a weaning contemporary group to enter a bull test, this bull would then be placed in a single-animal yearling contemporary group.

While bulls and heifers are able to be ratioed against one another for Angus Herd Improvement Records (AHIR®) reporting at weaning, gender will automatically be separated at yearling time. This means you do not need to place an additional group code to separate bulls and heifers.

Acceptable age ranges for yearling measures are between 320 and 440 days of age for yearling bulls and 320 and 460 days of age for developing heifers.

Weights and other measurements

Actual yearling weight collection needs to fit within the contemporary group standards defined above and must be taken no more than three days apart. These weights will be used not only for yearling weight (YW) EPD calculation but also for analyzing yearling height (YH) and scrotal circumference (SC). Long yearling weights that fall outside the normal age window, will not be used for YH or SC EPD calculations. For instance, animals weighed at 472 days of age will not be used for YH or SC EPD calculations.

Yearling heights can be taken during yearling weight collection to improve the accuracy of this EPD. With that, individual SC measures should be collected at this time to be used for NCE. Even if members plan on executing breeding soundness exams (sometimes referred to as BSEs) for young bulls closer to sale time, scrotal measurements only taken between 320 and 440 days of age can be utilized for genetic prediction. If bulls at the time of the BSE are older than 440 days of age, these measurements cannot be utilized to more accurately predict SC EPDs.

Temperament scoring

Yearling temperament scoring is an ongoing effort of the American Angus Association to better predict differences in docility within the population. Animals are scored on a 1-to-6 scale. A 1 represents cattle with mild dispositions and favorable temperaments, while a 6 describes very aggressive animals. The scores provided are designed to evaluate disposition differences when processing animals through the chute, including how animals enter, exit and react while being handled. To learn more about the specifics of these scores visit *www.angus.org/Performance/AHIRDefault.aspx#FS.*

Foot scoring

Yearling time is the earliest point in which foot scores can be collected. In many instances, this is the last time large groups of young bulls will still be in large enough contemporary groups so analysis can take place.

Producers need to evaluate the worst front and rear foot for two different scores, foot angle and claw set. Scores range from 1 to 9, with 5 being the ideal score.

These scores should be taken on animals before hoof trimming has occurred. As the Association gathers additional foot score data, AGI hopes to establish a selection tool, possibly an EPD, for use in the seedstock and commercial industries.

Foot scores on mature females will also be accepted and are encouraged to accurately depict the variation amongst the Angus breed.

Ultrasound

Although it may take place on a different day, ultrasound data must be collected in the same time frame, 320-440 days of age for bulls and 320-460 days of age for heifers. Scan weights need to be taken at least within seven days of the technician's visit. Contemporary groups are defined in the same way, starting with the base weaning contemporary group, then moving on from there.

At least two animals of the same gender must be in a contemporary group for scan data to be used in the Association's weekly genetic evaluation.

Ultrasound scans must be taken no more than three days apart. Additional details on ultrasound and where to locate a technician can be found at *www.angus.org/Performance/Ultrasound/PerfBreederProtocol.aspx.*

DNA collection

Whether or not you choose to DNA profile your animals, it is a good idea to have DNA on hand for future testing. Whether it will be used to sire-verify a commercial customer's calves in the future because a bull got hurt and was sent to harvest, or a young female enters the donor pen and needs to acquire parentage SNPs for calves to be registered, it is always a good idea to have access to a sample.

If you are thinking about genomic-testing your sale offering to include the genomic component in your offering's EPDs, remember to submit samples at least three to four weeks before the sale book deadline to allow time for processing.

Along with the many other duties farmers and ranchers face on a daily basis, our members are commended for the jobs they do in collecting and reporting data to the Association. If any questions arise at yearling collection time, please do not hesitate to contact anyone in the Performance Programs Department.

EMAIL: kretallick@angus.org