Udder Importance

As beef breeds begin to place more emphasis on recording teat and udder scores, the Beef Improvement Federation has established standardized guidelines for the scoring process.

by ***Kindra Gordon***

With the spring calving season around the corner, it's time to get the calving book ready for recording calving date, birth weight, etc. But you might consider adding an extra column to the data you collect this year — teat and udder scores for the cow.

Sure, you've likely tracked those cows with "bad bags" in the past and culled them after weaning. However, because most udder and teat characteristics appear to be heritable, seedstock producers are being encouraged to score teat size and udders for the entire herd and use the information in future selection decisions.

The Beef Improvement Federation (BIF), which is made up of beef producers, breed association representatives and university researchers, is leading this charge. In June 2007, the BIF Board adopted guidelines to standardize future teat and udder scoring.

Scoring from 1 to 9

Udder and teat size can directly affect calf performance and cow longevity. Therefore more emphasis is being placed on monitoring this trait, explains Lauren Hyde, who serves on the subcommittee that proposed the standardized guidelines for BIF. Hyde is director of performance programs for the North American Limousin Foundation (NALF).

Also serving on the BIF subcommittee are Mark Allan, U.S. Meat Animal Research Center (USMARC); Susan Knights-Willmon, American Gelbvieh Association (AGA); and Sean McGrath, who works as an independent consultant with several Canadian breed associations.

In the past, various teat and udder scoring systems have been used by different breed associations. The newly approved BIF scoring system has two separate scores (see Fig. 1), both on a scale of 1 to 9, for teat size and udder suspension using the following guidelines:

- ►For teat size, 1 would indicate big, bottle teats, while higher scores would be for small teats.
- ►For udder suspension, 1 would indicate a pendulous udder, with 9 being a higher, tighter udder, according to Hyde.
- ►Scores must be established within 24 hours after calving, preferably on the weakest quarter. This is because if the cow is going to have udder quality issues, they will be most apparent when she first freshens.
- ►Cow age should not be considered when scoring udders.
- ►Teats and udders should be scored without regard to the cow's milk production — as calf weaning weights are the best estimates of milk production.
- ►To ensure consistent scoring, it is also recommended that scores be conducted by one person for the entire herd, Hyde says.

The ideal udder would have a score in the middle of that 1-to-9 range, with quarters that are evenly balanced and snugly attached, and teats of medium size and moderate length.

Cows with teats that are too small may have reduced milk flow to the calf. Teats that are too large may make it difficult for the calf to nurse. And, if a cow's udder is too large, there is an increased chance for injury or mastitis and a deterioration of udder quality over time.

Hyde recognizes that teat and udder scoring has not been commonplace across the beef industry. Of those who do score, she says, "I think they use it mainly as a culling criterion rather than for selection."

But, as collection of teat and udder data increases, it is anticipated it will become more of a selection tool in the future to seek out sires that produce daughters with good udders.

Looking ahead

"Our Board of Directors feels strongly about collecting information on traits of importance to the Angus female, like teat and udder scoring," says Bill Bowman, vice president of information and data and director of performance programs for the American Angus Association.

To that end, he says, the Association is placing increased emphasis on encouraging more Angus producers to evaluate teat and udder scores on females in their herds. An option in the Angus Information Management Software (AIMS) allows for permanently recording udder score data (see Fig. 1).

"Some Angus producers have focused on udder selection conscientiously and don't have lots of problems. This is a trait that goes back to stayability; it is one of the finer details," Bowman says.

He adds that the Angus breed is working to communicate with Angus producers who have a history of collecting teat and udder scores. "We are at an evaluation standpoint to see if there are some differences to note that can be useful in future selection," Bowman says. "Our Board is exploring how to use udder scoring data in the future."

Bowman says the Angus breed has not yet determined if it will work to establish an expected progeny difference (EPD) for udder scores or if it will use the information as part of a selection index. But he reiterates the importance of collecting data on udder scores by saying, "This information will provide an opportunity to create new tools that can lead to genetic improvement."

Hyde reports that NALF is also placing emphasis in collecting udder and teat scores

and eventually hopes to include that data as a component of a maternal index.

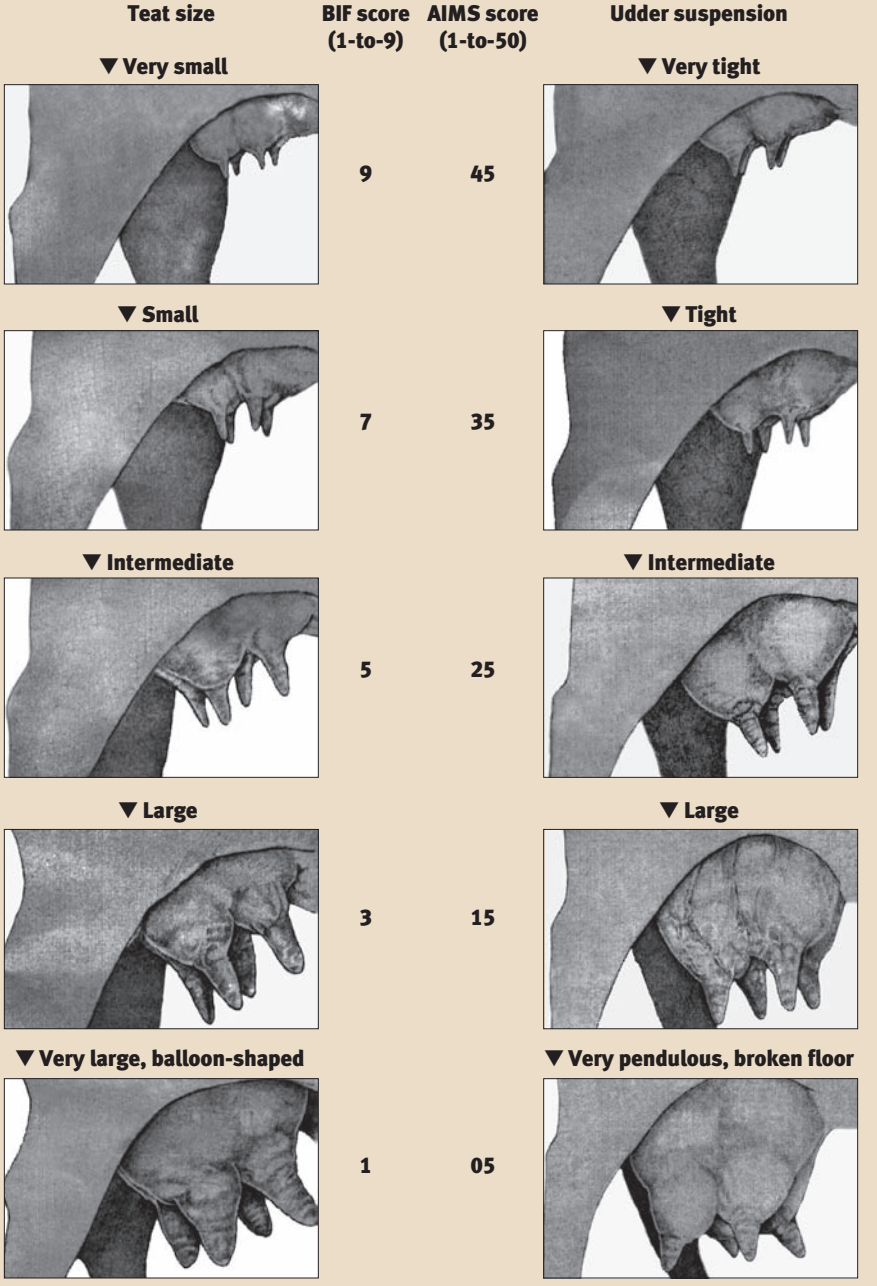
The AGA has had an udder scoring system in place for their breed and has begun to build a database for the trait. Susan Willmon with AGA explains that their past system was based on the 1-50 scoring guidelines developed by the American Holstein Association.

She says the new BIF system, with scores from 1 to 9, should be simpler for breeders to implement.

Willmon believes that udder scoring does affect breed improvement. In the early 1990s, AGA made a big push with breeder education regarding udder scoring, she says. "The progress made at this point is reflected in udder quality of Gelbvieh cows today."

AGA sees the new BIF udder scoring system as a renewed educational opportunity for Gelbvieh members, Willmon says. "Long term we envision incorporating this data into a cow profitability index." AJ

Fig. 1: Visual for udder scoring system as adopted by BIF and as presented in AIMS



Note: These illustrations were originally created by the American Gelbvieh Association (AGA) to accompany its 0-to-50 udder scoring system. This visual system easily translated to the 1-to-9 scoring system and was adopted by the Beef Improvement Federation (BIF) at its November 2007 board of directors meeting for inclusion in the *BIF Guidelines*.