$W and $EN

More Tools in the Female Selection Kit

Although these indexes are designed for the cow-calf producer, they are also a valuable aid for purebred breeders selecting replacement heifers and the bulls that sire those heifers.

by ***Becky Mills***

Look at the components of the dollar value indexes ($Values) weaned calf value ($W) and cow energy value ($EN). For $W, birth weight, weaning weight from direct growth, maternal milk and mature cow size contribute to the index. Plus, to make it even more meaningful, the input costs of getting those extra pounds at weaning are factored in.

A more specialized index, $EN can be used with other selection tools in areas where the environment is less than friendly and groceries are hard to come by. Cow energy requirements, both in lactation and from differences in mature cow size, contribute to $EN.

"We use $W pretty strongly," Ben Eggers, manager of Sydenstricker Genetics, says. "I don't use $EN because its components are included in $W. $W is more of a complete maternal value."

The Mexico, Mo., Angus breeder continues, "We live in a very strong cow-calf state, so I feel it is more useful to our customers. Most of them sell at weaning or within 45 days of weaning, so $W should be paramount to them, especially those retaining replacement heifers."

That's what Sally Northcutt, the American Angus Association's director of genetic research, likes to hear. "$W, like the other $Values, was designed with the commercial bull buyer in mind. The purpose is to help simplify the list of selection tools."

"Aimed more at the cow-calf producer who sells calves at weaning, $W translates genetic values into the language of economics," Northcutt says.

Eggers uses $W to select the dams of the bulls targeted for his commercial customers, especially in the spring-calving herd. "Our spring-born bulls have higher $W values, more maternal values, lower birth weights and lower mature size. We use $W for the replacement heifers in that division especially and for donors as well. Like any purebred breeder, I'm going to look at the components of the value, but it is a good place to start to identify those curve-bender bulls that have a lower mature size."

He describes their fall-born bulls as the more terminal type, higher growth, larger-framed bulls.

"Until the last couple of years, most of our commercial customers were focused on growth. But those customers, especially the ones retaining replacement heifers, are starting to use $W or components of $W to hold down mature size."

At Woodhill Farms, Brian McCulloh uses his own version of the selection indexes. "We have used the ingredients of these indexes for the last 24 years. When I sort sire summaries for bulls, I do not put in parameters for $EN and $W. That is because we have always used the individual component traits that are currently factored in the calculation of $W. An index that is appropriately created should help breeders resist single-trait selection."

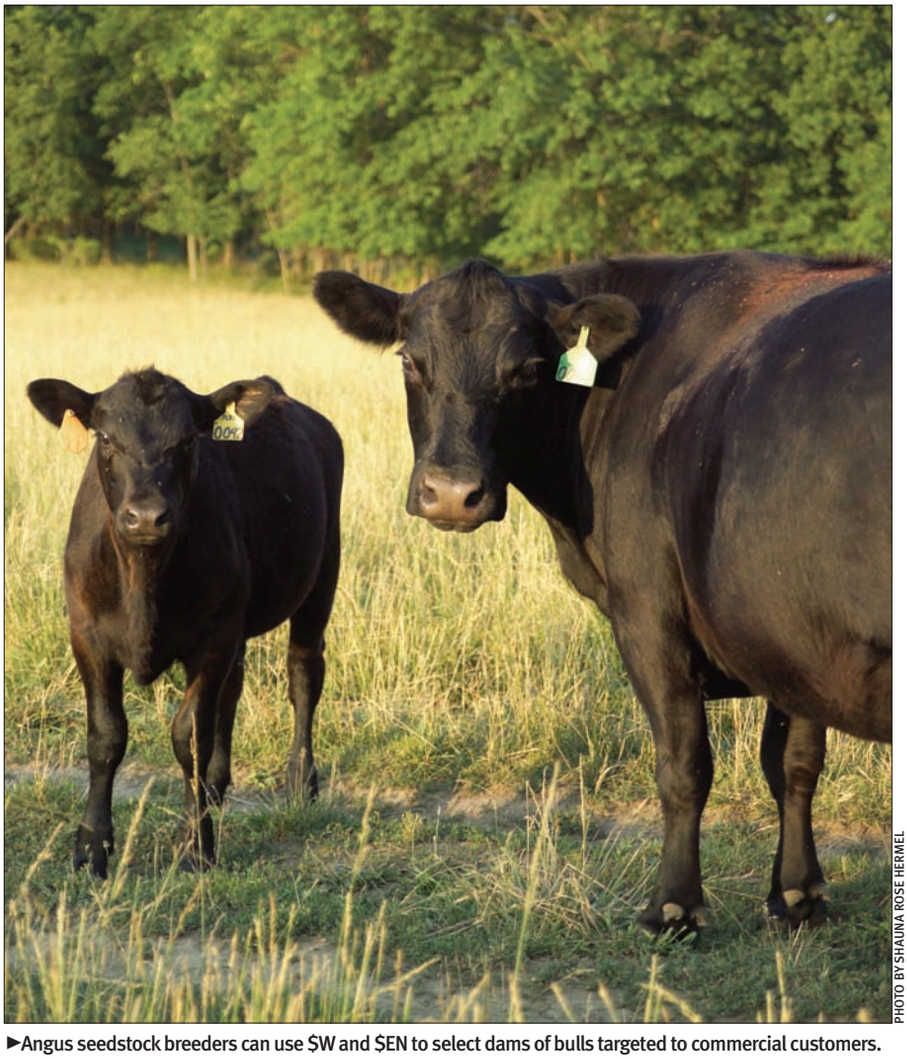

PHOTO BY SHAUNA ROSE HERMEL

►Angus seedstock breeders can use $W and $EN to select dams of bulls targeted to commercial customers.

The Viroqua, Wis., Angus breeder says, "$EN, at this point, is a means to put an objective value on what we've known all along. Increasing growth and milk adds cost."

Residual feed intake (RFI) is receiving attention as an economically relevant trait. It is a measure of feed efficiency. Not all cattle at the same level of production and the same size eat the same amount of feed," McCulloh says.

While McCulloh says $W and $EN have simplified the selection process for most breeders, he still likes to customize his selection tools.

"I'm a big fan of using independent EPDs (expected progeny differences) for specific traits. That allows me to place more or less emphasis on an individual trait, and correspondingly, that emphasis is dependent on our specific breeding program objectives," he says.

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— Brian McCulloh

In Woodhill's case, that is predictable, uniform, moderate-framed, high-performance Angus cattle. "Our customers seem to value calving ease, but once the calves are born, they want cattle that can gain weight efficiently. Right now, around 50% of them sell their calves at weaning, but the percentage of commercial customers who are retaining ownership is increasing," McCulloh says.

Virginia Tech animal scientist Scott Greiner agrees with relying on EPDs for specific traits when needed. "It is important to look at the component traits to make sure your goals are being met for each of the traits."

But he also agrees on the need to avoid single-trait selection. "Breeders need to use these tools in a multiple-trait selection scenario," he cautions. "For example, $EN is a valuable selection tool for keeping cow size and maintenance costs in check. But mature size is related to growth. So if you put heavy selection pressure on cow size, you'll negatively impact growth."

Even though Eggers uses both EPDs and $Value indexes in his multiple-trait selection decisions, he also keeps an eye on his cattle and their management as well.

"We still look to see how the female compares to our other females and why," he says. "There is no substitute for knowing your cattle."


Ben Eggers


Sally Northcutt


Brian McCulloh