

MAKING THE MATERNAL BREED

More Maternal

Breeders discuss approach, selection methods for a herd that does it all.

by Miranda Reiman, senior associate editor

The stories seem a little like folklore now, but they were real experiences just a few generations ago. Cattlemen talk about nightmarish calving seasons — pulling more calves than those they didn't.

Today, a cow that can have a calf all on her own has become so commonplace, it's a trait that's easy to take for granted.

"One of our biggest success stories is calving ease. Obviously tracking calving dystocia events at birth, and also weighing those calves, has allowed Angus to have a lot of success in the calving ease debate," says Kelli Retallick-Riley, president of Angus Genetics Inc. (AGI).

But the "maternal" discussion is far more complex than a healthy live birth, she says, and many of the traits that help define a good mama cow take extra effort, and sometimes even years, to collect.

Another challenge? The rate of progress can be slow.

Cattlemen often match cows to their region or resources, which points to the very fact that they're lowly heritable traits, with a lot of environmental interaction, Retallick-Riley says.

"When you think of that in terms of a genetic selection tool, that means that it's going to take us a couple more generations to make the genetic change that we want to make in a more lowly heritable trait," she notes.

But it's not impossible.

Creating cows in Kentucky

Those are the kind of conversations Retallick-Riley often has with Joe Lowe, Oak Hollow Angus, near Smiths Grove, Ky.

"The cows are kind of the employee," Lowe says. "They have to show up. It's our job to take care of the cow, it is the cow's job to take care of the calf."

Many customers are within 200 miles of the farm. He knows where the cows will do their work, including a sometimes damp climate and fescue pressure.

"If they can walk, if they can slick off and they can breed — those are the three non-starters if they don't in our environment," Lowe says.

When he barely notices a cow, she's a keeper.

"Everyone says the best cow's the one you don't know she's there until she's 6, and you look down and she's got two daughters in the herd," Lowe observes.

Yet, as a seedstock provider it's his job to find them and he makes more.

"If she's here on her eighth birthday, we're going to keep her until she's done," Lowe says. "We're going to keep her, and we're going to breed every single daughter and hope the numbers line up."



If they have a female with longevity, they'll use the bull to complement in another area.

"I've got bulls on the farm that'll have a 30-pound range in weaning weights and have the same \$M (maternal weaned calf value). So, we'll make sure we pump some of those higher growth, higher carcass merit, \$M bulls with good feet, good fertility back on those cows to give a more marketable daughter," Lowe says. "If they can breed that many times, they're already pretty efficient in our environment."

Maternal in Montana

Across the country, the climate is different, but the approach is similar. Chad Denowh, Sidney, Mont., employs the philosophy first adopted by his grandpa, dad and uncle at Gartner-Denowh Angus Ranch: start with phenotype and then add additional data into their selection criteria.

"We want the cows to look the part first and foremost, but they also have to have the structure, the leg structure, the udder structure, to hold up and stay in these herds for a long amount of time," Denowh says. "Everybody up in this country culls their open cows, and if they don't stay in the herd, they don't make you money."

They've used the Angus Herd Improvement Records (AHIR®) program since it was first introduced in the 1970s, and now have more than 50 years of trends to draw on.

"We work a lot with efficiency and raising a good calf in a timely manner," Denowh says.

They cull harder than most commercial producers, he estimates, and often flush the oldest cows.

"They're not going to have the prettiest numbers because that's kind of how the EPD (expected progeny difference) system works. The older cows maybe take hits — the younger animals have better EPDs — but we know we can breed them to these sires that have the good EPDs and hopefully raise more daughters with that longevity built in," Denowh says.

Similar to mature weights, it takes several daughters to get accuracy built on a mature weight of a sire, he says.

"It is a long process and hopefully with genomics, we'll make progress faster," Denowh says.

The cow and the carcass

Both cattlemen work at having a calf crop that is in demand, no matter the intended marketing.

"There's a lot of guys that don't think you can have maternal and carcass together — sure you can, it just

takes longer," Denowh says.

Sometimes that means not using the top carcass bull if it doesn't meet certain maternal parameters. He's seen mature cow weights stay moderate while pushing growth traits, and he's made improvements in calving ease while also improving marbling.

"I don't think they're antagonistic at all, any of the traits," Denowh says. "I think you just have to find out which traits are most important to you, and have a program and stick to it."


The AGI team continues to use the Association's database — the largest beef breed database in the world — to find ways to better characterize maternal genetics, Retallick-Riley says. That will allow them to create additional selection tools, such as cow fertility or regionally adapted EPDs.

Since calving ease EPDs came out in 2005, the breed has steadily added additional measures to aid in cow herd selection, such as docility, heifer pregnancy, hair shed, foot angle and claw set.

"We've been spoiled because we have great members who really take care of their cow herd. They cull hard," Retallick-Riley says. "They really get rid of those problem animals in those problem areas, but we're here to help them figure out which animals they need to remove from the herd sooner, and that's really where our genetic tools can come in."

Having data to train the genomics for the entire Angus breed is essential, she notes. Both Denowh and Lowe are enrolled in MaternalPlus® and say that's given them an advantage.

"People who have already tried to select on something like longevity or even some of our newer traits like foot structure or hair shedding or heifer fertility ... those are the people who usually surface to the top when we have a new tool come out," Retallick-Riley says. It's not an Association-bestowed reward for turning in data, she explains, but rather a product of the work they've already done.

"It's because you guys have been able to find the winners and the losers," she says. 

Editor's note: Denowh, Lowe, and Retallick-Riley joined The Angus Conversation to discuss what it takes to have cows that work where they live and work further down the line. Listen to the full episode on all major podcast platforms, or visit TheAngusConversation.com.

