Mary Had a Little Lamb…

…then she started breeding for carcass merit

Carcass 101

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Will there come a day when scanning sheep and goats for carcass merit is as commonplace as scanning beef is now? Will breeding stock be selected based on EPDs? Will the market pay premiums for loin muscle depth?

"It's only a matter of time," says Polypay sheep producer Jerry Sorensen of Harlan, Iowa. "We're about 20 years behind dairy and 15 years behind beef, but we're getting there."

Sorensen is part of a group of producers who formed the National Sheep Improvement Program (NSIP), an entity created with the mission of collecting genetic performance data and calculating EPDs, much as the beef breed associations do. Six breeds are currently in its repertoire - Targhee, Suffolk, Polypay, Dorsets, Hampshires, and Columbia - with others on deck as soon as they have enough data from the breed to establish genetic linkages.

While the numbers simply haven't been there in the past to provide for accurate sampling, Sorensen says that is about to change as NSIP transfers its data to the Australia-based LAMBPLAN. With its massive database of millions of animals, (compared to around 200,000 in NSIP's) LAMBPLAN relies heavily on ultrasound data to calculate carcass merit EPDs.

The ultimate benefit for the U.S. sheep industry is a giant leap forward.

"It's not like it's technically any different," says Dr. Chris Schauer, Director of the North Dakota State University Hettinger Research Extension Center. "It's just not as widely used. There isn't the selection pressure."

In the sheep business, ultrasound measures loin depth and backfat, much as with beef. Maternal rams produce replacement ewes designed to put lambs and the ground and terminal sires are bred to put meat on the carcass.

Both sides of the genetic equation can benefit from a data-based system.

Schauer and Scott Greiner, Associate Professor of Animal and Poultry Sciences at Virginia Tech's College of Agriculture and Life Sciences, cite two key reasons why ultrasound in the sheep business hasn't progressed far beyond Ram Tests and a small cluster of progressive producers. Producer perception is one of those reasons.

"They think the numbers are too small," Schauer explains. "You're looking at a one or two pound wean-weight difference. And that doesn't seem like very much."

"Producers need to start thinking in terms of the number of livestock it affects," he continues. "If you have 50 lambs, that's 100 pounds, and that's significant." Schauer says now, when the lamb market is good, is the time to promote this concept. "One or two pounds adds up fast at $1.25 per pound."

The other major influence, or lack there-of, is the absence of strong market signals filtering back through the system, according to Greiner. "There is no formalized pricing system for market lambs," he explains. "No 'grid'. The market is not highly driven by carcass merit."

Some packers do buy on the grid, according to Sorensen, but only on large contracts. The small producer, as yet, is rarely able to tap into the system. Iowa Lamb for example, generally will implement grid pricing only for around 500 animals or more.

Like beef, he adds, the goal is the 55-pound Yield Grade 2 Choice. The discounts expand from that central ideal.

But, he also adds, it is an idea whose time has come. More and more major U.S. producers are shopping by the numbers and aiming at the grid targets. And more seedstock producers are breeding with the end product in mind.

"EPDs created from ultrasound measurements are still the best tool to assess actual genetic merit," says Greiner. "As the market signals increase, so will the use of available technology for genetic selection. Ultimately it means dollars and cents on the table. This is where the rubber meets the road."

Sorensen agrees it's the money that will ultimately do the talking. "When the guy down the road says, 'Why are you getting $10 a hundred more than I am?' and the answer is 'Because I'm breeding for carcass traits that will fit the grid' they'll get the message."

More and more, throughout the industry, carcass merit, EPDs, and ultrasound as a means of measurement, are making their way onto center stage.

Virginia Tech published sheep EPDs two years ago. And 4-H programs that use ultrasound are being enthusiastically met by the younger set.

"We ultrasound for backfat and loin at the county fair as part of the merit class," explains Mike Cass of Fontanelle, Iowa, a sheep producer and leader in a resurgence of sheep into the 4-H spectrum. "The kids really get into it and into learning why it's important."

Like Australia, Europe and particularly the UK have relied heavily on the technology for some time.

The NSIP has hosted a Center of the Nation sale each year for the past six years, and this year producers will post their first ultrasound-generated data.

As "breeding by the numbers" becomes more common, the sheep and goat meat industries will benefit from the technical infrastructure already provided by existing entities like the CUP Lab® and the Ultrasound Guidelines Council.

Quality standards and a commitment to superior service will provide the foundation as technicians are trained for different animals and software is adapted. The basic scanning equipment is the same, only changes to the probe and stand-off might be necessary.

"We need trained techs," says Sorensen, "all across the country. And CUP Lab® is in a perfect position to do that." He says sheep will be easier to scan than cattle because loin depth is easier to measure than ribeye size.

And the CUP Lab® has the expertise to assist with helping to generate carcass data for breeding and market success. It is committed to assisting the American sheep industry in developing and utilizing carcass merit and other genetic trait EPDs.

Ultrasound, and the data it can generate, is an idea whose time has come in the sheep and goat industry. Mary's little lamb is about to become a nice, lean, juicy loin chop. Break out the garlic and herbs.