

ESTABLISHING

True Value

BY CHRISTY COUCH

Glen and Sally Dolezal, along with several others from Oklahoma State University, believe the Boxed Beef Calculator could lead to more money in producers' pockets.



Oklahoma State University's (OSU) Glen and Sally Dolezal believe marketing by live price offers little incentive for producers to improve the genetics of their herds beyond production performance and efficiency. About four years ago, Glen, along with Donald Gill and Tom Gardner of the OSU department of animal science, set out to discover a way to reward producers for high-quality genetics. Their result was a value-based price generated by the OSU Boxed Beef Calculator (BBC).

For years we've encouraged cattlemen to search for cattle with improved carcass value and for the genetics to produce them. But a high-quality carcass from high-quality genetics isn't always reflected in the payback to the producer.

Glen Dolezal, Oklahoma State University (OSU) professor of meat science, and his wife, Sally, OSU Extension beef cattle breeding specialist, believe today's methods of marketing cattle must advance in order for producers to see more return.

Because cattle are sold at the same average price when marketed on a live cash basis, ultimately superior cattle get discounted and inferior cattle get a premium. This average price includes insurance for dark cutters and undesirable yield grades, resulting in a discount to account for nonconformers that is applied equally to all cattle in the lot.

The Dolezals believe marketing by live price offers little incentive for producers to improve the genetics of their herds beyond production performance and efficiency.

"Shouldn't a producer get a little plus for quality or red-meat yield that in the long run would give him a slight advantage?" Glen asks. "That's the question we're trying to answer with this boxed beef calculator. Instead of being satisfied with all cattle

getting this average price, let's give them a value-based price."

About four years ago, Glen, along with Donald Gill and Tom Gardner of the OSU department of animal science, set out to discover a way to reward producers for high-quality genetics. Their result was a value-based price generated by the OSU Boxed Beef Calculator (BBC). Simply stated, by entering into the BBC an animal's carcass weight, USDA Quality Grade, Yield Grade, dressing percentage, and the values of 19 boxed beef items under current market conditions, a value for the carcass based on its wholesale boxed beef value can be established.

The prices are based on wholesale prices, because retail prices are not reported on a national scale for all 19 boxed beef items used by the BBC. Also, if OSU had based the prices on retail prices, foodservice and export values would not be reflected.

When the appropriate information is entered, the pounds of meat, bone and salable product can be discovered. Wholesale prices of commodity- and close-trimmed cuts, based on quality grade and trim, and total dollars generated also are available.

"Not only do you need to know the value of the meat, you have to know the value of the byproducts," Glen says. This

value is also calculated by the BBC.

Those associated with the BBC believe someday producers may have the option of marketing cattle on this boxed beef price. While they believe it will do a better job of rewarding cattle for their true value in the marketplace, they say not all producers will benefit.

Discounts for misfits

"If they have some cattle that are misfits, or don't quite make the mark, they're going to have discounts that could far outweigh the premiums they receive on a certain percentage of their cattle; Sally says. "They will get discounted on those that do not conform and do not work. That's frightening, but it's reality."

The Dolezals agree that producers must know their herds' performance levels before venturing into this method of marketing.

"Obviously, the best method of marketing is to know your cattle and know their performance characteristics year after year, season after season, not only on the production side but also the carcass merit area," Glen says.

"You have to have some assessment of what your cattle will do before you jump into something like this," Sally says. "Even if you have existing carcass data, you can still



get discounts for unknowns. Rather than guessing, it's better to know what your cattle will do."

The road to a boxed beef EPD

With the BBC, if enough progeny of sires are calculated, not only would the value of these animals be known, an expected progeny difference (EPD) for boxed beef value could be developed.

"If you can take a database and figure out what the progeny of sires are worth, there's potential to generate genetic value or EPDs based on the values you assess on each sire," Sally says. "That's where you can have some impact on the future genetics of commercial cattle."

The boxed beef value EPD could serve as a sire-selection tool.

If this were widely available as an EPD, producers could improve the carcass merit of their herds by using high-ranking bulls, Glen says.

Establishing an industry par

To be used for an EPD, an average or base of prices for the 19 boxed beef items would have to be established, as well as a set price spread among quality and yield grades.

"The only concern that we have is that when you start trying to rank seedstock on value, if the value's not consistent, if it has seasonal highs and lows, we have to have a way to address that," Glen says. "And it makes sense. The operation either needs to be quality-based or yield-based or average."

The spread between the prices of Choice and Select beef can vary dramatically according to season. The Choice-Select spread tends to peak during the fourth quarter (October to December) and reach a low during the first quarter (January to March) of the year.

"If you figure an average annual boxed beef value, then will it only be most applicable for the second and third quarters of the year, and might it change rank or position during the first and fourth quarters?" Glen asks.

"Obviously, high-quality sires that produce high-quality progeny would be most well-rewarded during the fourth quarter and not get as much benefit if their progeny sold in January, February and March," he explains.

This value difference would allow for different marketing strategies for producers.

"If a producer wants to raise high-quality progeny, he wants to know what his maximum value would be to inform his commercial buyers to get the progeny marketed in the fourth quarter to maximize return," Glen says.

To meet goals other than high quality, a high-yield index could be developed based on the first quarter, and an average sire value would be based on the average annual value of the Choice-Select spread.

If the boxed beef value were to become an EPD, Sally believes it would be used in fine-tuning selection.

"First, the commercial producer has to have a live calf," Sally says. "The producer's first choices are on calving ease on first-calf heifers or optimal weaning weights or genetic potential of cattle in the ranch environment. Once they feel they're doing everything else, then what's the next step? They need to know what their cattle will do."

The Dolezals believe the boxed beef value EPD would not be chased as a single-trait selection tool because the boxed beef value is based on multiple traits and simultaneously evaluates yield and quality grade.

"I don't think we're in the business to pick one trait and run with it," Sally says. "Picking a bull with long-term success doesn't lie in single-trait selection."

The boxed beef EPD would benefit producers because of its economic implications, says Glen. "It has a dollar sign with it. We always want to speak in dollars, but it's sometimes difficult to do that. The boxed beef value can do it."

A combined effort

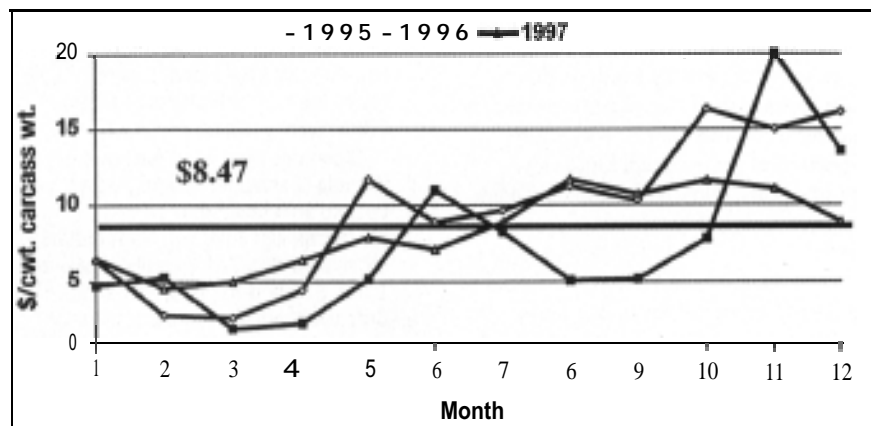
In order for the BBC to be used to its full potential as an EPD, all levels of cattle production — from the commercial and seedstock producers to the breed associations — must be actively involved.

The commercial and seedstock producers must have meaningful raw data to be input into the program, and they would rely on the breed association to provide data on all registered bulls with progeny results.

"The breed association has data and ties with reference sires," Sally says. "And with good progeny numbers per sire, the association could evaluate all sires in the

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Figure 1: Choice-Select price spread for closely trimmed boxed beef from 1995 to 1997



"Even if you have existing carcass data, you can still get discounts for unknowns?"

—Sally Dolezal

breed on the boxed beef value index.

"All segments should make an effort. It's everyone's challenge," she adds.

The American Angus Association is one association willing to take advantage of the opportunity, says John Crouch, director of performance programs.

"I think it's a really exciting concept simply from the standpoint that in the past we've done a good job in gathering data and evaluating data in regards to performance," he says. "The next step is to take that data and apply economic indices to come up with a dollar value based on the situation for the sires that are in service."

Crouch says the Association already has been working with OSU by supplying data and access to some data in the database for research. He says he expects it to be at least three years before an EPD is in use.

Aim for the future

"Long-term, even though the marketplace doesn't reward this today, if you're sound in your selection and value assessment of changes you're making in either genetics or management, you should come closer to where the industry should be," Glen says.

"You may not get paid for it right now; but in the future, you're either going to be held accountable for it or be more competitive because of it," Sally adds.

The OSU Boxed Beef Calculator program is available at no cost to anyone requesting a copy. It requires the latest version of Excel® computerized spreadsheet and access to prices.

However, the average producer doesn't have access to the 190 total prices needed in the calculator. The *Market News Report* reports most prices, except for all close-trimmed cuts, Prime and premium Choice, which is the upper two-thirds of the Choice grade.

"Eventually we want to take this from the meat level or just the packer-feeder interface back to the stocker operators and feedlot operators when they're buying feeder cattle, or even back to seedstock operators," Glen says.

Let's be fair

A new tool developed at Oklahoma State University (OSU) by Glen Dolezal, Donald Gill and Tom Gardner, all with the animal science

department, may help determine if those in the beef industry are getting a fair price for their product. The OSU Boxed Beef Calculator (BBC) uses carcass weight, USDA Quality Grade, Yield Grade, dressing percentage and the current wholesale value of 19 boxed beef items to determine a whole-carcass value. The applications don't end there.

"What we've been interested in is a boxed-beef-cutout basis and how the results that come about relative to boxed beef will relate to either the cash market or grid and formula basis," Dolezal says. "It's been frustrating for people that feel, either due to their genetics or due to their progressive management styles, that their cattle should be worth more than the average market price."

Dolezal says one promising development during the '90s from a meat scientist's viewpoint is the industry's willingness to use carcass traits to assess merit. That's created the possibility of using the BBC to evaluate the base price offered by packers and, subsequently, prices up the line.

On Sept. 25 when the cash (live) cattle market was \$59/hundredweight (cwt.), Dolezal says one of the top three packing companies was offering \$98/carcass cwt. as a base price. That price was based on a low-Choice, Yield Grade (YG) 3.5 carcass.

The packer then offered premiums for those carcasses exceeding the base requirements. Those grading Prime and in the upper two-thirds of Choice received \$3 and \$2/cwt. more, respectively. YGs 1 and 2 were rewarded with premiums of \$3 and \$2/cwt., respectively.

Discounts also were part of the formula. Carcasses grading Select were docked \$1 \$10/cwt., and "no-roll" carcasses lost \$14/cwt. Dark cutters received a \$35/cwt. penalty. YGs 4 and 5 had \$15 and \$20/cwt. deducted. Carcasses outside the normal weight parameters (650-950 pounds [lb.]) lost an additional \$25/cwt.

Dolezal says the packers' base prices



probably included insurance against inferior carcasses and supply-demand factors. Using the BBC to determine the base would be more objective, he explains. "The current packer grids are only a small step toward really rewarding merit."

A fairer base price on Sept. 25, according to his calculations, would have been \$97.21/cwt. Prime carcasses should have been awarded an additional \$5/cwt., and the upper two-thirds of Choice deserved \$2/cwt. more. The premiums for YGs 1 and 2 should have been closer to \$10 and \$4/cwt., respectively. For cash price, Dolezal estimates \$61.97/cwt. live would have been more on target.

Discounts would remain the same, even with BBC-based pricing, Dolezal predicts. "No one in the meat industry wants nonconformers at an average price," he says.

Even if packer grids were based on boxed-beef-cutout values, Dolezal points out it would still take a lot of premiums to offset the effects of a discount.

Using a calculator based on prices farther down the chain would help smooth out the fluctuations in the cattle market, adds the meat scientist. "Fed-cattle prices can move \$10 to \$15 per hundredweight, but it seems like retail prices remain constant regardless of what's going on in the rest of the world, particularly in the production world," he says.

Will prices ever line up with the BBC's projections? Probably not, Dolezal says, because packers need to maintain profit margins.

"Base-price determination is very critical and frustrating," he says, but the BBC may be useful for producers. "It gives you the flexibility to find at least a starting point to better negotiate," he explains.

— Brad Parker