

Tina Saitone:

Understanding the beef market, and whether sheepdogs are earning their keep

A visit to the supermarket meat case makes clear that special types of beef command special prices. From certified Angus to antibiotic-free to pasture-raised — along with designations such as certifications of traceability or specific vaccination protocols that consumers don't see — beef cattle are now marketed with long lists of "value-added" attributes.

For a rancher, each attribute represents both an added production cost and an opportunity to earn more when cattle are sold.

But cattle are sold at auction for a single price per pound — there's no itemization for what the buyer is paying for each attribute — so it can be difficult for ranchers to tell which practices are profitable and which aren't worth the trouble.

"Producers know their costs better than anyone, but the marginal value of each value-added attribute is really hard for ranchers assess," said Tina Saitone, who joined UC Cooperative Extension (UCCE) in

June as a specialist in livestock and rangeland economics based at UC Davis.

In a research paper in this issue of *California Agriculture* (page 179), Saitone and her co-authors report findings from a study designed to tease out the value of each of these attributes, as well as the price effects of forward contracting (fixing a price a month or more before the

cattle are delivered) and the distance a lot of cattle is from the major cattle feeding and meat processing hubs in the central United States.

Broadly, Saitone's research program aims to help cattle and sheep producers better understand the economics that influence their business decisions.

A native of Sonoma County, where until recently her family ran a small, century-old

vineyard started with rootstock brought from Italy by her great-grandparents, Saitone grew up around farming and horses and gravitated to economics as an undergraduate at Sonoma State University. She completed her Ph.D. in agricultural and resource economics at UC Davis in 2008 and worked for an economic consulting firm before returning to UC Davis.

An ongoing challenge is developing good sources of data on livestock markets in California.

The study described above drew on sales data involving more than 2 million head of cattle over 17 years, provided by Western Video Market, a Chico-based video auction operator that has partnered with UCCE Shasta County director Larry Forero on market studies for several years. In a video auction, buyers bid on groups of cattle based on video footage of the animals as well as verification documentation collected by the auction operator. Because the transactions are conducted online, video auctions generate large, well-organized data sets.

But Western Video Market represents only a portion of the total cattle sales in the state — most of the rest are sold through in-person auctions, with no systems for data reporting.

One long-term plan for Saitone and ANR collaborators — Forero, as well as Tehama County Livestock, Range and Natural Resources Advisor Josh Davy — calls for developing a monthly market report for cattle producers based on data from all of live auctions. The group is working with auction operators to standardize data collection and reporting.

Saitone is also working to better understand the role of predation in livestock production in California and the cost-benefit associated with a wide variety of non-lethal depredation strategies. One study looks at the guard dogs — typically Great Pyrenees or Anatolian Pyrenees — that many sheep producers now use to protect flocks from coyotes and other predators. By gathering data on lamb losses to predation, the effectiveness of guard dogs at preventing those losses, and the costs of maintaining a guard dog, Saitone said she hopes to help sheep producers with a basic calculation:

"Does the dog make sense? Does it save you enough to be worth it?" [CA](#)

— Jim Downing



Tina Saitone is a UC Cooperative Extension specialist based in the Department of Agricultural and Resource Economics at UC Davis.