

Profiting from AI

Cattlemen from different segments of the industry share their perspectives.

by *Kasey Brown*, associate editor, & *Troy Smith*, field editor



Five years ago, it cost 82¢ to produce \$1 of income from Terry Slusher's beef cattle operation. Now, each dollar of income requires an investment of 56¢. During the same period, his income per cow has increased by more than 90%.

The Floyd, Va., cattleman talked about keys to improving the profitability of his operation during the Applied Reproductive Strategies in Beef Cattle (ARSBC) Symposium hosted Oct. 15-16 in Staunton, Va. Slusher said his bottom line has benefited from maximizing the time cows spend grazing, while minimizing use of harvested feed, and from genetic improvement.



PHOTOS BY TROY SMITH

► "For my operation, heat detection is a waste of time," said Virginia cattleman Terry Slusher. He relies on a synchronized fixed-time AI program.

Slusher credited genetic advancement through synchronized artificial insemination (AI) for about half of the improvement in profitability. All of his fall-calving cows and his replacement heifers have been bred AI since 1995. Carcass data collected on steers owned all the way to slaughter is used for fine-tuning future sire selection. Listing the advantages, Slusher said AI makes crossbreeding easy and results in more females becoming pregnant early in the breeding season.

As a result of synchronized AI, greater than 89% of Slusher's calves are born in the first 30 days of the calving season. Early-born calves are then heavier at weaning. Slusher retains ownership of steers, and the AI steers are worth more at harvest due to heavier hot

carcass weights. AI-sired steers also produce more carcasses that achieve Choice or better quality grade.

"Over the last five years, the 'return to cow' for AI-sired calves was \$104 more than for calves sired by natural service," said Slusher. "AI-sired steers averaged 38.6 pounds (lb.) heavier for hot carcass weight."

Slusher also said implementation of synchronization protocols for fixed-time AI (FTAI) has eliminated costs for time and labor associated with heat detection. Still, conception rates to AI are near 70%.

"For my operation," said Slusher, "heat detection is a waste of time."

— by *Troy Smith*

A cattle association's perspective

It's "not how *I* profit from reproduction, but how *we* profit from reproduction. If we work together we can be more efficient, and if we're more efficient we can be more profitable," said Steve Hopkins, Virginia Cooperative Extension agent and Cattlemen's association member.

He explained two cooperative efforts by cattlemen's associations in Virginia — one offered by the Buckingham Cattlemen's Association and another by the Central Virginia Cattlemen's Association (CVCA). Both groups offer educational programs, both worked with Virginia Tech to find answers to common production problems, and both programs have an active service and supply program. Buckingham has an active AI program, and CVCA commingled heifers for a heifer-development program. Both programs emphasize marketing.

The Buckingham group accepts bids from AI companies for discounted rates on semen and labor. The board researches the bulls and considers the bids, then chooses two main bulls (one for heifers and one for cows) to be used by the group. The AI companies coordinate synchronization programs for each producer. Sons of the AI sires are used as cleanup bulls.

The program has allowed the 20 producers participating to group and sell feeder calves in uniform load lots that are half-siblings. Heifers can be marketed as half-siblings and even bred to the same new

bull. Both steers and heifers sell at a premium.

Hopkins explained that until 2006, the CVCA group commingled and developed heifers together, AIing the heifers to a chosen sire, then using sons of the AI sire as cleanup bulls. Heifers were pregnancy-checked, and the sex of the fetus was determined. Producers could take their heifers home or sell them with the



► Producers can profit from AI by coordinating their efforts, and marketing feeder calves and heifers that are uniform and genetically similar, said Steve Hopkins, Virginia Cooperative Extension agent.

group. The program was discontinued in 2006 due to the heifer market and feed costs, disappointing conception rates among commingled heifers, and some of the producers starting their own heifer-development programs.

CVCA now manages four or five sales a year, selling about 4,000 head of feeder calves per year. The cattle are sold on the board in load lots and are commingled to enhance uniformity, sorting by grade, sex, type and weight. CVCA also has a field day and tour each year with transportation and meals for buyers to come to the August sale. The field day also offers a trade show. Both programs follow up by visiting with buyers after the sale.

Their area has a unique marketing niche. Hopkins said Mennonite cattlemen like how the program uniformly packages the cattle and appreciates that the cattle had fewer respiratory problems.

Hopkins reported that the cattle often bring about \$18 more than average in the August sale with the field day.

He recommended that producers work together to receive additional profit, develop an education program and purchase products to increase uniformity.

Marketing is key, he said. "If you have a value-added product, you must market it as a value-added product."

— by Kasey Brown

A seedstock perspective

Though he resists becoming too set in his ways, Paul Bennett said he still sometimes fears his family's Red House, Va., seedstock operation is "behind the curve" in implementing technology. Always questioning the status quo, he said he looks for ways to improve beef cattle production at Knoll Crest Farms.

Bennett discussed the technologies he and his family apply to produce the 400 bulls marketed annually at Knoll Crest. The objective, he said, is to provide customers with bulls suited to an environment where tall fescue is the dominant forage.

Bennett said bull development has changed in recent years. Bulls are now grown on pasture and fed for modest gains of 2.5-3.25 lb. per day. Greater emphasis on a diet consisting primarily of forages has resulted in lighter yearling weights but increased structural soundness.

Explaining the application of synchronized AI, Bennett said replacement females are bred a week ahead of mature cows, using a 14-day CIDR® protocol. On average, a conception rate of 65% is achieved among heifers following first service to AI. A seven-day CIDR protocol is used for cows. Conception rates for fall-



► "AI and embryo transfer allow for genetic improvement at a relatively rapid rate, through the use of highly proven bulls," said Paul Bennett of Knoll Crest Farms.

calving cows are near 80%, while spring-calvers average near 65%.

"We use heat (detection) patches and breed twice a day, but I anticipate a change to timed AI. We're gaining more confidence in that technology," said Bennett.

"AI and embryo transfer allow for genetic improvement at a relatively rapid rate, through the use of highly proven bulls," added Bennett. "We're seeing as high as 75% to 80% conception with fresh embryos. Embryo transfer has become more user-friendly than in the past."

Bennett called ultrasound technology a "great tool," allowing early determination of pregnancy. Knoll Crest Farms uses ultrasound to determine fetal gender in a high percentage of females. That allows marketing groups of females carrying calves of the same sex.

An advocate of whole-herd reporting, Bennett said the practice is beneficial to respective breed associations and helps individual breeders better evaluate their breeding programs and move toward production of cattle that are more problem-free.

— by Troy Smith

Rewards for quality

"Adding value beyond just pounds is a challenge, but improving the quality grade sure can help achieve the goal of providing a quality eating experience for consumers," Larry Corah, vice president of supply development for Certified Angus Beef LLC (CAB), noted.

Beef prices are drastically higher than those of competing proteins, he said, so the beef industry must respond with quality. Since 2002, demand for the *Certified Angus Beef*® (CAB®) brand and upper Choice has increased 79%, while demand for commodity Choice has increased 3%.

The reason, Corah said, is greater consumer satisfaction with the higher-quality product. He explained that 98%-99% of consumers are satisfied when eating USDA Prime beef, 82%-88% are satisfied when eating CAB and upper-Choice-grade beef, 62% are satisfied when eating low-Choice beef, and only 29% are satisfied when eating Select.

Demand for premium-Choice and Prime is transforming the marketplace, Corah said, emphasizing that AI technology helps cattlemen reach the higher quality levels that are in demand.

Corah highlighted three major changes to selling beef: (1) new cuts like the flat-iron and *teres major*, (2) the shift in quality sold at retail and (3) premium grinds used in restaurants. All have increased beef sales.



► For cattlemen to get a premium, the consumer has to be willing to pay for the product they produce, said Larry Corah, vice president of CAB supply development. Consumers are paying for high-quality beef because it provides a positive eating experience.

Consumers like beef, but they like high-quality beef.

To those who question whether they will be paid for raising the high-quality target, Corah provided an example of premiums paid by a national program used by many producers in the area. For the top 25% of cattle, premiums in dollars per head have increased from \$26.39 in 1998 to \$117.94 in 2013.

"There are dollars out there for high-quality cattle. You just have to work to get them," noted Corah. AI helps you produce those top-tier cattle, he asserted.

He offered four key ingredients to producing higher-quality cattle: (1) genetics/DNA, (2) health, (3) nutrition and (4) reproduction.

"Genetics is the best growth technology out there. It works, and it is consumer-friendly. Consumers can get behind genetic progress," he said.

Early-born calves tend to grade better, and using timed AI technology helps produce those early-born calves.

— by Kasey Brown



Editor's Note: *Slusher, Hopkins, Bennett and Corah spoke during the ARSBC session focused on how different segments of the industry profit from AI. For more information, visit the Newsroom at www.appliedreprostrategies.com/2013 to listen to their presentations and to view their PowerPoints and proceedings. Comprehensive coverage of the symposium is available online at www.appliedreprostrategies.com. Compiled by the Angus Journal editorial team, the site is made possible through sponsorship by the Beef Reproduction Task Force.*