



Heifer AI— Sam Walton Style

Wal-Mart and Sam's Club founder Sam Walton taught us that buying in volume saves money. It is a lesson the consignors in Kentucky's Elite Heifer Sale have taken to heart.

Story & photos by Becky Mills

Since the early 1990s, Bourbon County, Ky., producers have been negotiating with Kentucky Artificial Breeders Association (KABA)/Select Sires on artificial insemination (AI) services and semen. The results make AI a practical option.

"If they go with the whole program, heat checking is \$2 a head," says KABA/Select Sires representative Kenley Conner. "It is \$5 a head to breed them." He adds there is also a labor charge if he has to spend the night—around \$50 for the cost of a motel room. On semen, he says they give standard volume discounts, usually a 10%-15% price break.

Volume they have. Paris, Ky., producer

Jason Sandefur says in spring 2002, the group pushed that discount up to 25% by purchasing around 1,400 units of "Traveler 565" semen.

Breeding heifers to the same bull provides the Elite Heifer Sale consignors with more than volume discounts—they can offer a uniform product at sale time. "We try to keep everything as consistent as possible," Sandefur says. In 2001, buyers responded by bidding the cost of AI-bred heifers up \$125 a head more than the bull-bred heifers. The sale average was \$984 overall.

Glenn Mackie, Bourbon County Extension agent and a driving force in the Elite program, says Conner's willingness to

heat-check also makes AI more appealing to producers. "That is a big help," Mackie says. "We breed heifers in early May, when producers are starting their field work and hay. They have a lot of competition for their time."

Synchronization makes the whole AI program practical. The heifer owners feed MGA® (melengestrol acetate) for 14 days, then 19 days later give an injection of prostaglandin. In 48-60 hours, the heifers come in heat.

"This is the estrus synchronization program with the least amount of risk," says University of Kentucky animal scientist Les Anderson. "It consistently gives you the highest AI pregnancy rate with yearling heifers."

With properly managed, properly developed heifers, like the Elite sale heifers, Anderson says AI conception rates usually range from 50% to 65%.

The MGA-prostaglandin regimen is also economical. "MGA is around a nickel per head per day, plus the feed costs. The prostaglandin is around \$4 a dose. With the feed costs, it will run around \$10 to \$12 a head."

Trying something new

At Berle Clay Farm, which he manages, Sandefur normally uses the MGA-prostaglandin program to synchronize and AI 225-250 Angus-Charolais heifers a year. "Most years we have conception rates above 55%, usually around 62%, 63%," he says.

Even though the MGA-prostaglandin program has been a success for Sandefur, this spring he plans to use the recently approved CIDR (controlled internal drug release), an intravaginal progesterone implant device that shortens the synchronization period to seven days rather than the 35 days needed for the MGA-based method.

With the MGA program, he estimates that an AI pregnancy costs \$35-\$40. "It costs us \$23 to \$24 a head to breed each animal AI, then you have to average that over the ones that didn't stick," he explains.

Even though the premium for AI-bred heifers was down to \$23 a head in the 2002 Elite Heifer Sale, Sandefur says the synchronization and AI program still pays, since they keep part of the heifers for their own replacements.

First, the calves from the synchronized heifers hit the ground during the first of the breeding season. "Looking at an animal that is born 21 days earlier, you'll get 40 pounds more at weaning," he explains. "With \$90- to \$100-a-hundredweight (cwt.) calves, you can get that \$40 out of them. Plus, the

► **Above:** Glenn Mackie (right) and Jason Sandefur say consignors in the Elite Heifer Sale program save money by negotiating in groups for semen and artificial insemination services.

genetics you get in your own replacement heifers is another big advantage.”

Natural service vs. AI

Kathy Meyer tried the MGA synchronization and AI program in spring 2002. She and farming partner Clarence Abney, both of Paris, Ky., buy around 600 replacement-quality Angus heifers a year to develop, breed and sell. On average, 60%-70% meet the breeding standards. The top 165 go to the Elite Heifer Sale, while the other qualified heifers are sold in other sales or by private treaty. The remaining 30%-40% go in a stocker program.

The first six years of the Elite Heifer Sale Meyer and Abney used AI but weren't getting a return for their investment, so they started relying solely on natural service. After the \$125 premiums in the fall 2001 Elite Heifer Sale, they gave AI another try.

“It didn't pay for us,” Meyer says. Despite having the heifers in top shape (Elite Heifer Sale heifers get reproductive tract scores before the start of breeding season), following the synchronization protocol to the letter and having the top AI tech in the state do their breeding, conception rates were dismal. Even though it was a countywide problem last spring, Meyer says they are leaning toward natural service for the spring 2003 breeding season.

“It ended up costing us \$75 an AI pregnancy,” she says.

When the 2001 premiums for AI-bred heifers didn't show at the 2002 sale, she points out, “Some people went home with bargains.”

Labor is also a major challenge at Abney-Meyer Farms. They have hogs, sheep, row crops and hay to deal with during May. However, to keep costs down they did everything but the actual AI breeding themselves. “It took three people almost full time when we really needed to be doing something else,” Meyer says.

Still, she adds, “If I were keeping heifers, I'd AI again.”

Select Sires and their competitors offer similar volume discounts, synchronization and AI programs in other parts of the country.

ABS Global's Doug Frank says, “Our representatives can, and do, offer full-service AI programs from synchronization to heat checking to breeding, in addition to proven genetics.”



► **Above:** By AI breeding their heifers to the same bull, consignors in the Elite Heifer Sale offer buyers a uniform product.



► **Left:** Natural service offers a better return than AI for Paris, Ky., producer Kathy Meyer.

He says the rates vary, but adds, “It is more economical to work with larger groups.”

In Bourbon County, Mackie says they've seen participation in the KABA/Select Sires program mushroom. “Five years ago, Select

Sires was doing 600 to 700 head in this area. Now they are doing three times that many. It has been good for everybody.”



Plan to succeed

Successful synchronization and artificial insemination (AI) programs don't come about by accident. To increase your odds of having your heifers come in heat and settle AI, Paris, Ky., cattleman Jason Sandefur says, “No. 1, your heifers need to be in a body condition score (BCS) of 6 and 7, mostly 7s. If you have 5s, you have a problem.”

Sandefur, manager at Berle Clay Farm, also says the heifers get a reproductive tract score before the start of breeding season.

“Second, make sure everything is done when it is supposed to be done,” Sandefur says. That includes following the synchronization protocol exactly — feed the heifers the proper amount of MGA every day, at the same time of day, for the 14 days the protocol specifies. The same timeliness is crucial with the prostaglandin injection.

Sandefur says sorting and breeding are other key areas where timing is critical. They sort cattle out for breeding when their K-Mar patches are red, indicating the heifers stood when they were mounted.

“We sort twice — once right before or during lunch, then we breed those heifers around 7 o'clock that night,” Sandefur says. “We sort again right before dark and breed those heifers at 7:30 the next morning. That seems to work pretty well.”

Kentucky Artificial Breeders Association (KABA)/Select Sires representative Kenley Conner adds, “We start heat checking around 36 hours after we give the prostaglandin shot. They come in heat 48 hours after the shot, but we'll pick up a few earlier.” He continues the twice-a-day heat checks for two and a half days.

He also says, “The key to watching heat is to get the ones in heat away from the other heifers. When you've got a dominant group, the heifers don't pay any attention to the other heifers in heat. Once you pull the dominant heifers out, you'll find more in heat.”