



Left: Larry Rowden has watched reproductive technologies evolve since the days when there was no synchronization.

technician at a Texas A&M University experiment station.

Helping people

“In the summer of 1979, I got loaned out to ABS to help with research on synchronization systems using Syncro-Mate B®. We inseminated cows in research herds located across the country, from Nebraska to Oregon, and then returned at preg-testing time to see how things had worked. That was my introduction to ABS,” explains Rowden.

“In late 1979 an ABS sales management position opened up. At the time, some synchronization systems being promoted just weren’t working. I felt that the ABS role could put me in a position to help more people use the technology

correctly,” he adds.

For a year, Rowden represented ABS in a territory including Wyoming and eastern Montana. In 1981, he moved to Nebraska as district service manager. Early on, much of his time was devoted to conducting AI schools for producers and their employees, as well as professional AI technicians.

Rowden has watched reproductive technologies evolve since the days when there was no synchronization, and AI always involved heat detection. When he first started, “AI season” on a given operation might last as long as 60 days. Development of systems for estrus synchronization shortened the amount of time devoted to heat detection. Some synchronization protocols allow for fixed-time AI (FTAI), so a producer can schedule the day and time of insemination. Thus, the total amount of time needed for AI has been

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A passion for bovine reproduction.

Story & photo by Troy Smith, field editor

“It was where I learned to drive,” grins Larry Rowden, recalling time spent, as a youngster, at the U.S. Meat Animal Research Center (MARC), near Clay Center, Neb. Rowden’s father worked in a MARC beef cattle research unit back in the 1960s. On weekends, he took his son to the facility. Together, they would check cattle.

“In the beginning, I opened gates for him,” recalls Rowden, “but one time we got stuck in the mud. I was still pretty small, so he got out and pushed while I drove. After that, I did most of the driving, and Dad opened the gates.”

It wasn’t too different from many rurally raised kids that first learned to steer a motor vehicle over fields and pastures. With some 30,000 acres of grassland and many miles of interconnecting service roads, MARC made a good training ground. It also provided

exposure to several thousand beef cows and opportunity for some father-and-son talk about what went on at the site.

Rowden doesn’t claim to have suddenly made a career choice at that tender age. However, the experience did plant a seed. It would eventually blossom into a passion for bovine reproduction and a commitment to helping beef cattle producers apply practical technologies for improving reproductive performance.

During the Applied Reproductive

Strategies in Beef Cattle (ARSBC) workshop Aug. 29-30 in Ruidoso, N.M., the fruit of Larry Rowden’s commitment was recognized. The national Beef Reproduction Leadership Team presented Rowden with its Service to the Industry Award. After serving the beef industry for 39 years, currently as ABS Global’s district service manager based in Broken Bow, Neb., Rowden was heralded for outstanding contribution to furthering the application of artificial insemination (AI) and estrus synchronization.

Rowden’s fascination with AI started early. By the time he entered high school, his family had returned to their native Colorado. There, at age 16, Rowden learned how to inseminate cows. He worked on area ranches, breeding cows, while continuing his education at Colorado State University. Following graduation, he went to work as a research

significantly reduced.

Rowden also recalls how the early years of AI focused on cows. Introduction of a protocol pairing melangestrol acetate (MGA) with prostaglandin (PG) ushered in a shift in emphasis toward AI for replacement heifers.

“The new focus was on breeding heifers to calving-ease sires for a defined calving season. Some operations began specializing in developing and marketing AI-bred heifers. The emphasis on heifers continues today, with fewer cows bred by AI,” says Rowden.

“It’s easy to see the value of AI-bred heifers (which typically are pregnancy-checked by ultrasound, as well) for a producer’s own replacements or to sell. They consistently bring \$100 to \$150 per head more than a heifer bred by natural service.”

According to Rowden, the industry is trending toward increased use of FTAI. Among his district’s sales representatives and their clients, FTAI typically is most popular among the younger crowd. People of a certain age who started with heat detection and grew comfortable with it may be more reluctant to change. Used correctly, both methods work.

“With heat detection, you inseminate the females you find in heat, and not the others. Fixed-time AI takes less time and you just inseminate every female,” notes Rowden. “You get about the same number of pregnancies either way.”

Teaching

Another change Rowden has witnessed involves who is actually doing the inseminating. When he began, producers interested in the advantages of AI often were eager to learn how to perform the job themselves. In the wake of the 1980s agricultural recession and the resulting smaller labor force, many medium- to large-scale cow-calf operators started hiring professionals on a custom basis. Rowden estimates that

more than half of the females in his district are inseminated by professional technicians. Producers with smaller herds are most apt to inseminate their own cattle.

With insemination duties concentrated in fewer hands, generally speaking, there is less demand for AI schools than 20 or 30 years ago. Still, Rowden coordinates a few schools each year in Nebraska, Wyoming and Colorado. He also teaches introductory courses at the University of Nebraska–Lincoln, and the University of Nebraska School of Technical Agriculture in Curtis.

He still goes “hands-on” beside ABS representatives, personally inseminating some 1,000 to 2,000 females per year — a number he discounts as comparatively small.

“There are close to 100,000 females bred (annually) by ABS reps in this region, and a couple of those guys breed over 10,000 head ... each,” says Rowden.

AI was introduced to the U.S. beef industry more than 60 years ago, but the adoption rate among individual producers remains low. The share of cow-calf operations applying AI is estimated at around 10%, with a majority of AI practiced by seedstock breeders.

Rowden believes a major reason why the AI adoption rate remains

“AI is often introduced to an operation following transfer of management from one generation to the next.”

— *Larry Rowden*



During the Applied Reproductive Strategies in Beef Cattle workshop, the national Beef Reproduction Leadership Team, represented by Sandy Johnson (right), presented Larry Rowden with its Service to the Industry Award.

PHOTO BY JULIE MAAS

productive and longer life in the breeding herd. Evidence shows that heifers that conceive early in their first breeding season are more likely to do so for the remainder of their lives.

Getting more females bred early means more calves born early in the subsequent calving season. Females then have ample time to recover prior to rebreeding. With more calves born early, they should be of more uniform and heavier

weights at weaning. “The availability of sexed semen also may help increase the use of AI,” adds Rowden. “Many producers want high-performance calves, but they are concerned about their cows getting too big. Sexed semen offers a way to breed some cows to maternal-type sires, and get 85% or more heifer calves (from which to choose replacement females). Other cows can be bred to terminal-type sires, targeting high-performance calves.”

According to Rowden, a fundamental reason to consider AI is the opportunity to access proven, high-quality sires to advance genetic improvement more rapidly in heifers saved for replacements and calves marketed. Rowden says ABS is currently conducting research to show value differences at harvest between calves sired by an average AI sire and a high-indexing AI sire. With evidence that AI-sired cattle represent consistently higher value at harvest, there should be opportunity for cow-calf producers to capture a share of that value when selling their AI-sired calves, or claim even more value for themselves by retaining ownership. |

While reasons associated with economics are often cited, Rowden believes shunning AI can also be “a cultural thing.” It’s a little too different and involves too much change, so it is met with skepticism. “You see it time and again,” says Rowden. “AI is often introduced to an operation following transfer of management from one generation to the next. It’s that next generation that’s more willing to adopt different technologies.”

Rowden is confident that use of AI will increase over time, believing there are plenty of reasons why it should. High on the list is the opportunity for improved reproductive performance that comes from synchronized AI. Replacement heifers bred by AI can be set up for a more

low, especially among commercial producers, is because of the labor requirement. While systems for implementing synchronized AI have become more practical to implement, females still have to be handled multiple times. That alone makes some producers reluctant. Also, there is a perception that AI is always more costly than natural service. In fact, costs for AI are competitive and, in some instances, may even be lower than with natural service, he says.

Editor’s note: Troy Smith is a cattleman and freelance writer from Sargent, Neb.