

ARTIFICIAL INSEMINATION- Here in the Real World

by Kathleen Bee

It's been researched, discussed, written about and examined from every angle. Most breeders know the benefits of artificial insemination. These successful breeders offer the tips that have made AI realistic and reliable in their herds.

"Read it right out of the book. Heat detection, a good nutrition-al program and timely insemination are the keys to a successful AI program," says David Gibb of Piper City, Ill., who started an AI program back in 1966 because he wanted to expand his herd's genetics beyond that of his herd bulls. After 26 years of AI experience, Gibb knows what it takes to make an AI program work. He AI's nearly 85 heifers and cows yearly, achieving a 68 percent to 77 percent conception rate on the first service.

The Gibb herd is not a pampered one. Kept on two sun drenched dry lots year-round, one for the mature cows and one for the heifers, the herd is fed twice a day with corn silage and alfalfa grown on the Gibb farm. David has yet to use additional supplements; he depends on his trained eye to determine when extra feed is needed to maintain body condition of his herd.

Heat detection gets a lot of attention in this herd. From late March through July, walks are taken through the herd three times a day to heat detect. With the help of his son, father and a full-time employee, the cows and heifers are watched carefully for about 25 to 30 minutes in the early morning, afternoon and evening.

"I pretty much know when a cow should come into heat based on calving dates," says Gibb. "We keep track of first heats, then are aware of when the females should be coming into heat for the second time." David acknowledges that his situation allows him to heat detect easily, but urges anyone implementing an AI program to pay close attention to it.

Once a cow is detected in her second heat, she and her calf are herded into the barn where they wait to be bred that evening. The Gibbs do all of their own insemination using ABS sires, such as Power Fix, Traveler, Traveler 71, Rito 2100, Maxima or Piere. An efficient set up of chutes, gates and pens allows breeding to be done easily by one person. David prefers to wait until the second

heat to breed, feeling that the extra month has given his cows a little more recovery time which enhances his herd's conception rate.

"Heat detection can be frustrating at first, but it's very satisfying to see the genetics in live form," says Gibb.

You've Got to Get Right in There!

"Heat detection is an active process, not a passive one," says Alan Kapp of Cosby, Mo. "You have to get out and be right in the cows. A lot of people will sit in the pickup or on the fence, but the thing that helps me the most is to get in and move the cows around."

The 60 females that Kapp breeds each year are kept on 20 to 25 acre pastures, so getting out among them is important for accurate observation. "Often won't see any indication of heat from the distance, but once I stir them up I'll find one or two in heat," continues Kapp. "It seems that moving and mixing them helps to stimulate heat activity. He recommends moving the group into a corner of the pasture for closer concentration. He also likes to heat detect at dusk during hot weather.

"It seems like once it cools off a little, they really get to moving," says Kapp.

He also stresses the need for having dedicated people do the heat detecting. "You've got to have somebody who knows what to watch for and the importance of it."

Like most successful breeders, Kapp knows how recordkeeping can make heat detection easier. He keeps a notebook handy and after the cows start calving, if he witnesses any cow coming into heat he writes it down. That makes it easier to catch the second heat. Kapp inseminates his own cows, making

sure that those bred are at least 40 days post-partum at the beginning of the breeding season. He enjoys it so much, he has recently become a representative for American Breeders Service.

The rule at Kapp's is to service a cow by AI only once. His 1991 calf crop reflected an 85 percent conception rate, but Kapp has been satisfied in the past with a 65 percent conception rate on first service females.

Continued on page 236



Alan Kapp, Cosby, Mo.

Continued from page 234

A touch of cow psychology makes breeding easier. He has two separate chutes and pens — one for veterinary or high-stress procedures and the second for breeding only.

"I like to leave the breeding chute open and accessible to the cows . . . it becomes common to them and they get to know that it won't hurt them," explains Kapp. "I get them used to running through it. They learn to associate that breeding's not a harsh experience."

He also advocates not restraining the animal with a headgate. "When at all possible, just use a bar behind the cow," notes Kapp. "I think it makes a big difference to make it as easy as possible on the cow."

Big Pastures Are No Excuse

Galen Fink of Manhattan Kan., learned 14 years ago what AI could do for his herd. Now other AI breeders are now-benefiting from his experience. Fink's Angus owns interests in four sires at American Breeders Service — New Trend, Emulation 5522, 8E8 and Future Trend.

Describing his breeding procedure as "you've got to see it to believe it," his solution to the problem of AI breeding on pasture is one born out of necessity and invention. The Fink herd is situated on 250 to 300 acres of rolling hills and brush covered ravines where cows coming into heat could hide for days. To solve the initial problem of heat detection, Fink synchronizes his herd with Lutalyse. He then heat detects and breeds using a trick learned from his days as herdsman for the Kansas State University herd.

He sets up several rings of nine to 10 panels in the pasture near the minerals and water where the herd will emerge at night, then sweetens the attraction with a little hay.

"It only takes about a bale of alfalfa a week and they get used to going in there. It works real slick," claims Fink. "The cows will kind of drift around inside the panels so you can work in around them. You work the cow that you want behind a squeeze panel, swing the panel around, tie a rope behind her and breed her."

The females have the opportunity to be bred three times in 60 days, using a gomer bull for heat detection assistance. Fink results? A 95 percent to 97 percent conception rate.

"We have very few open cows," says Fink. "And when we do we can usually trace it back to a fertility problem in the cow's family."

Keeping the cows in groups of 70 to 80 head gives the best results for Fink, who AI's up to 180 head at a time. "When the groups get up to more than 80 cows, it gets a little tough," says Fink, who does all of the separating and breeding on his own.

Fink stresses the necessity of proper semen handling in AI

success. "I see a lot of people thaw their semen out, then expose it to the sun or wind. I'm always very careful when handling the semen, following the guidelines for thawing semen and maintaining its proper temperature."

Outsmarting the cows is a key to AI success, suggests Fink. "I like to think that we're cowmen, not cowboys," he says. "What's the difference? 'Cowmen know how to handle the cows and outsmart them — cowboys try to out-run them.'"

Locking Up an AI System

Another cattleman who solved the problem of AI breeding on pasture is Stan Lock, formerly of Hiawatha, Kan., who is now a district sales manager for American Breeders Service in Arkansas and Missouri.

Frustrated with the two major stumbling blocks to AI of inadequate facilities and no extra help, Lock developed a mobile lock-up stanchion system that enabled him to take AI to the cows while working alone. His idea appealed to other breeders and soon Lock was building the "Toronado" system for them, too.

"The Toronado can be pulled into a lot or pasture where the cows are 'trained' on their own to use the trailer," Lock explains. "Within three to seven days, the cows get to know the trailer as their feed source and become accustomed to the gentle banging and clanging of the bars that trip and untrip when they insert and remove their heads."

When the cows need to be secured, the cam at the front of the trailer is simply activated. As the cows voluntarily enter the individual stanchions, they're locked in.

"No one needs to be present when the cattle are being caught," says Lock. "You can activate the cam at your convenience and return at your convenience to inseminate. The cattle don't realize they're being caught because the same noise occurs whether they're just going in and out to eat or being locked in."

(More information on the Toronado can be found in the article by T.L. Gatz that appeared in the Fall 1991 ABS Beef Breeders Journal.)

Practice Makes Perfect

"AI will sometimes stand for aggravation insemination," says Bill Eaton of Clear Dawn Farms, Huntsville, Ill., about his learning experiences in AI breeding his herd of 100 purebred Angus. "But practice makes it better and better, if not perfect."

Practice has been a key ingredient to Eaton's success in heat detection, as well as insemination. Eaton heat detects his herd three times per day, watching especially close during the cooler



Ready for AI season— Bill Eaton, Huntsville, Ill.

Continued from page 236

times in the morning and evening. He alone is the “heat-seeker,” shunning the use of a gomer bull.

After years of watching his females for signs of heat, he swears he can almost tell by the look in their eyes. He has learned to recognize the social patterns and individual mannerisms that give positive indications of heat, in addition to the usual signs. Again, he advises to keep at it.

“Obviously, the more time spent observing, the better the final results,” he says.

Eaton finds that it’s helpful to keep a pocket date book handy. When he observes a heat or breeds a cow he flips forward about 16 days and notes her at the top of the page for the next five to six days. It works as a reminder to double-check her during those days for a second heat or service, if necessary.

“Timely supplies of adequate nutrition levels play a most significant role in fertility and early re-breeding,” says Eaton. “We’ve found that Mother Nature will help best in this process if we make the right advance payments to her in the form of energy supplies.”

Culling slow breeders or late calvers year after year is a way to enhance herd fertility, suggests Eaton. He adds that there are probably both genetic and management factors and interactions to take advantage of in regard to fertility— and in both sexes.

“The groundwork for continued good fertility is often laid years in advance,” says Eaton.

Not only does he maintain his herd’s high fertility by culling late breeders, but also by trying to use sires that exhibit excellent

scrotal development, fertility and libido at an early age. “With all the good sires available, we think this is an important sorting criteria. After all, reproduction is the most valuable trait, for both us and our customers,” he says.

Investigative sire selection plays a big part in Clear Dawn’s AI program. “It takes so long to find out if we’ve make the right choices, especially in terms of the daughters,” explains Eaton. “I enjoy this animal ‘Star Search’, and the year-long anticipation of the new calf crop as all pan of the sizzle of the cattle business. Evaluating EPDs, herd records, previous calves, parents, progeny in other herds, and the people behind the sires and programs makes for interesting research and is time well-spent.”

Eaton generally likes to use a high percentage of proven sires, such as Rito 2100, Valedictorian, Piere and Traveler. Early use of Rito 149 and Rito 72 also paid high dividends. He finds the ABS Genetic Trait Summary (GTS), the first program to accurately and objectively describe type trait differences for individual sire’s progeny, quite revealing and useful.

Eaton sees a successful AI program as a chain, linked by sire selection, culling for better fertility, good nutrition, intelligent and plentiful heat detection, proper insemination techniques, and the use of high quality semen. To keep his chain running smoothly, he oils it with motivation and the desire for success.

“Unfortunately,” muses Eaton, “a failure at any link probably can’t be compensated for by working harder on the other links.”