Importance of Estrous Detection in Cattle

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There are many ways to determine estrus in a cowherd. Each year producers strive to increase profits by implementing the best management practices for their operations. Cow/calf producers can focus on many different areas of their operations to lower break-evens and still produce quality calves. Whether natural service or artificial insemination breeding plans are being utilized, simply being accurate with estrus detection can help increase reproductive efficiency.

If natural service is being utilized, knowing when a cow or heifer is in estrus can be very useful in determining her ability to settle and produce calves. If a female continues to show signs of estrus after being exposed to a bull for 2 – 3 cycles, her ability to settle should be evaluated. Since the gestation length in cattle is approximately 283 days and having one calf per year is the production goal of most cow/calf producers, cattle must be bred within the remaining 82 days. Within this 82-day time frame approximately 91% of cows in good body condition should show signs of heat by day 60. If the majority of cattle in the herd are in heat by day 60, this leaves only 22 days or one additional cycle to calve once every 365 days.

Estrous detection is crucial in artificial insemination breeding programs. Without accurate detection, mistakes can increase break-evens and lower overall profits. Costs can be elevated due to wasted straws of semen, technician costs and time. Ultimately, accurate estrus detection should be used to successfully bred cattle with artificial insemination.

One method of estrous detection is visual observation. This method is commonly referred to as the AM/PM rule. This involves checking the cow herd in the morning and the evening for 30 – 45 minutes each time. Cattle that are in heat in the morning will be breed that evening or if in heat in the evening will be breed the following morning. This method is very effective and can be easily implemented.

Some cattle may not show visual signs of heat during the time visual observation is being performed and are very difficult to determine when they cycle. There are many tools available to producers that may help determine when cattle have been in heat. Tail chalk, paint and paste can be applied to the tail head and used to determine if a cow has been active between heat checks. These products are applied to the tail head and the hair is pushed forward. When a cow or bull mounts a cow, the hair is pulled back and stands pointing up. Other tools that can be utilized are patches applied to the tail head, detector animals (gomer bulls, cystic cows and hormone-treated cows) and computerized detection devices. Determining estrus in cows and heifers can help producers determine which females in their herd have problems breeding. Deciding on the proper method of detection for each individual producer may depend on many factors. Producers can contact their local county agent to help with this decision or call me at (912) 681-5639.