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GET THE MOST FROM YOUR ACTIVITY MONITORING SYSTEM

BY MARK CARSON, REPRODUCTIVE SOLUTIONS MANAGER, EASTGEN

Automated activity monitoring systems are now the backbone of many herd reproductive management systems. This technology is helping herds achieve reproductive results that seemed impossible only a decade ago. The growth in usage and performance of activity monitoring technology is one of the reasons we are now seeing many herds achieving a pregnancy rate of 30 percent or higher.

How do you get the most out of your activity monitoring system while ensuring your herd is getting the most return out of this capital investment?

The easiest to understand but sometimes the hardest to change is the impact of cow nutrition, environment and health on your herd's reproductive performance. If cows are not cycling or cannot express estrus, they will not show up on the system.

These issues always relate back to the cow's diet, her surroundings and the animal's general health. The longer the length and high peak in activity, the more likely a cow will be picked up accurately by the system.

Recent work done at the University of British Columbia looked at the factors related to peak activity levels andduration when monitoring cows with commercially available activity monitoring equipment. Each cow was fitted with an activity collar and a leg-mounted pedometer. The neck collar and leg-mounted pedometer had an estrus detection rate of 89.6 percent and 85.5 percent, respectively, during the trial.

The research showed that a low body condition score was associated with reduced peak and duration. The study also found more pregnancies per A.I. service from cows that had a higher peak activity level. Lactation and secondary signs of heat were also related to estrus.

It is also interesting to note that milk production on the day of breeding had only a weak relationship with peak activity levels, although when categorized into percentiles, it was shown that higher-yielding cows have slightly reduced peak activity levels and durations.

This work done by the University of British Columbia shows the overall importance of managing body condition score and how it can relate to estrus expression in your herd.

There are ways to measure your system's performance from data that can be made available on your farm computer. For DairyComp 305 herds, it is recommended that you set up your breeding codes to track which breedings were identified by the activity system and which were done by timed A.I. Use this collected information in DairyComp 305, then monitor the percentage of first services found by the activity monitoring systems compared to the percentage bred by the timed-A.I. protocol. Breaking this percentage out by lactation number can help to measure general cow health by age of the animal. A herd with a breeding protocol allowing cows to pass 80 days in milk without a first service can set a goal of 70 to 80 percent of first-service breedings coming off of activity monitoring.

With activity monitoring, you do not have to worry about spending an hour each day doing heat detection; that chore will now be done in seconds. It is important to point out that an activity monitoring system is not labor-free. The system must be maintained properly just like any other piece of equipment on your farm.

Having tags on too loose, on backward or not on the cow at all will lower your system's performance. Lactating cows coming into and exiting the herd need their collars switched.

Having collars on cows three weeks prior to calving is now recommended to allow an adequate amount of time

to build a baseline for health monitoring through the transition period. It is heavily recommended that you collar the entire herd.

There are many advantages to collaring all the cows, from saving time moving collars to additional health monitoring benefits and early abortion detection. If you do not budget time for this work to be done, you will not get the full benefit from the system.

Using this technology to its full potential, including all the additional features, will have the greatest impact and benefit on your herd. Depending on the manufacturer and how much you are willing to invest, there are a variety of options that can provide data on the cows in your barn.

Find out what the technology can do for you, set out goals on how you're going to use it and then invest the time to make it work. Challenge the people who work with your herd to find ways to examine and use the information collected.

Too often, herds only skim the surface of the information being collected on their cows and don't get the full return on their investment.

Within the next decade, nearly every cow will be wearing an electronic device that will monitor activity plus much more. We will have more information at our fingertips than ever before, with the goal of challenging ourselves to use this information to its full potential. sizes, unreliable methodologies, use of non-human test subjects, and the involvement of the A2 Corporation in the research as reasons to dispute or doubt these studies. Though some of detractors have noted there isn't likely to be any negative factors associated with A2 beta-casein, they also point out that if these studies were valid the implications would have far more reaching impact on the health and dairy industry (Truswell, 2005). The research and analysis on this subject is quite active and will likely continue for many years.