



# CEDAR GROVE VETERINARY SERVICE NEWSLETTER



APRIL 2018

## ACTIVITY MONITOR SYSTEMS ARE CHANGING THE WAY WE BREED COWS ... AGAIN

There are moments where innovation and technology have resulted in rapid changes in dairy farm management. In 1922, the Surge bucket milker would change the industry by providing a way to milk cows that did not require hand milking. In 1937, the industry would be changed again when the first artificial insemination(AI) company was established in the US. Milking parlors, in conjunction with freestall barns, began popping up in the 1970's and have now allowed herds to grow beyond the size that any stanchion barn could ever have held.

The next big leap may be activity monitors. You may have heard about activity monitors from fellow farmers or in print. They are often known better by some of their product names such as Cow Manager, SCR/Heatime, SelectDetect, or Heatwatch. They all operate on the basic principal that a gyroscopic detector located in either an ear tag or neck collar detects movement in three dimensions. Estrus is determined by detecting increased activity, which has been a traditional sign of heat in cattle. In addition to the activity tag, the

monitoring system also requires an antenna to detect the activity and a computer system with the proper software to track and record activity.

Further features that may also be included with the activity monitor system are cow temperatures, eating times, rumen function, and cow position (standing vs. lying). Activity and these other measurements are often combined to provide an overall indication of cow health. This allows for earlier detection of cows that may have health problems ranging from a DA to lameness to mastitis.

So, what are some of the benefits to using an activity monitor system? Many of the companies report that their activity monitor systems will pay for themselves in 1-2 years after installation. The reasoning behind this is that the activity monitors will decrease labor costs associated with detecting heats, decrease hormone costs and decrease semen costs.

The changes in costs due to these factors will depend greatly on the management system in place prior to

## TEST YOUR DAIRY FARMING KNOWLEDGE

1) Class III futures are averaging \$14.69/cwt through 2018. The last major dairy crisis was in 2009, what was the average Class III price at that time?

- a) \$10.53/cwt
- b) \$12.06/cwt
- c) \$11.36/cwt
- d) \$11.86/cwt

2) How many cheese plants are currently located in Wisconsin?

- a) 144
- b) 315
- c) 75
- d) 95

3) In what year was the Hoard's Dairyman founded?

- a) 1905
- b) 1848
- c) 1901
- d) 1888

*Answers on back*

installation of the activity monitors. The benefits to the overall productivity of the herd is through earlier ages at first calving, decreased calving intervals, and increased milk production due to decreased DIM. Additionally, if the health features are utilized, there is gain from earlier detection of disease and overall healthier cows.

It should be made clear that having an activity monitor system does not necessarily mean that you don't have to use any hormone shots or timed AI programs. In a recent study, it was shown that activity monitors only detect heat in about 70% of animals eligible to be bred. This is an improvement over tail-chalking, but still leaves 30% of cows that will need to use other methods to get bred. Activity monitors will not necessarily pick up non-cycling cows, cystic ovaries, and pyometras. These can all affect breeding capabilities. Many producers find a balance between using activity monitors for a majority of the breedings and using a secondary method such as Ovsynch for animals that don't show heat on the monitors.

What are the things that a farmer should consider before installing an activity monitor system? Farmers should consider the number of activity monitors they may need. Some farmers keep activity monitors on all their cows all the time.

Others only keep them on until the cow is confirmed pregnant. Still others use the system only on their heifers due to management reasons, labor concerns, or distance of heifers from the main farm. The number of activity monitors will affect the overall cost of the system.

Another consideration is the distance that the antennas need to cover for all the activity monitor tags to be read in every barn and pen where it is needed. In some case, this may require positioning of several antenna stations or computer stations. Additionally, some of the activity monitor software also requires an internet connection and not all activity monitor systems are compatible with all software management programs.

Finally, with any technology, a farmer should know about the technical and customer support that comes with the system. Unfortunately, technology like this cannot just be taken out to the shop and beaten on until it works. It is worth the money to have a system that will be supported by someone at all hours of the day, weekends, and holidays. This is especially important if the farm does not have someone that is competent in utilizing computer technology.

The last point to be made about activity monitors is that research is showing that overall

conception rates are actually better on Timed AI programs over activity monitors. While that may make it seem like the hype around activity monitors may not be worth it, consider one last thing: consumers.

The last few years have seen consumers drive the banning of tail-docking, the elimination of BST-use, and restriction of antibiotics in feed. While it is no way on the radar in any sort of legislation, there is always the risk that consumers may learn or decide one day that they would rather not have their milk come from cows that receive hormone injections to become bred. Activity monitors may actually put farmers ahead of consumer preferences as we all consider a world where non-farm people are more often deciding how we manage our dairy farms.



### Dairy Farm Knowledge Answers

1: C 2: A 3: D