

Texas Dairy Matters

Higher Education Supporting the Industry

FINDING COWS IN HEAT

Ellen R. Jordan, Ph.D.
Extension Dairy Specialist
Department of Animal Science
Texas A&M AgriLife Extension Service
The Texas A&M University System

Getting cows pregnant continues to be a challenge in Texas. Finding cows in heat continues to be a challenge on many dairies.

The first impediment is Texas weather. Although everyone seems to realize that fewer cows are found in heat during the extreme heat of the summer, remember that cold winter weather can also reduce heat detection. Although there isn't a lot of snow and ice in Texas, cows won't show heat as well when there is ice on the ground. Frozen mud in some lots creates poor footing that can reduce mounting behavior as well.

The ideal footing for heat detection is dry ground or pasture, however properly grooved concrete can work. How crowded an area is can impact heat detection as well. If cows are crowded in a small area, more false heats may occur.

On the other side of the coin, if cows are widely scattered, they may not exhibit heat either as they don't have a chance to interact with other cows. This usually isn't much of a problem for our dairy herds, but sometimes youth that have just one or two heifers have a hard time identifying when their heifers are in heat because there are no other animals with which to interact.

The number of cows in a group required to get good interaction depends upon whether synchronization is used or not. The maximum number of mounts usually occurs when four or more animals are in heat at the same time. Thus without synchronization programs over 80 open cows would be needed in a group to provide an average of four per day in heat. Having four or more cows in heat the same day also increases the number of times a cow is mounted in a day.

Based on some recent data from Virginia Tech, cows average just 8.5 mounts per heat. Only about 10% of the cows stand to be mounted more than 12 times, while nearly 15% are mounted less than 3 times. Unfortunately they didn't report how many other cows were in heat on the same day. However, this data was collected in smaller herds, so it is doubtful that very many cows were in heat on any given day.

Although some data had shown that a higher percentage of heats occurred during the night time hours, recent data shows that the number of heats is fairly evenly distributed across the day. What caused the bigger variation was when cows were moved for milking or onto loafing lots. Thus it may not be as important to do those late night heat checks as once thought.

One other problem that has been identified is that the average heat for a Holstein cow lasts just 7 hours, rather than the 12 to 18 hours once thought. This means heat checks must occur at least 3 times a day. Otherwise cows won't be seen in heat just because they are in heat for such a short period of time.

Finding cows in heat can be a challenge. Providing good footing for animals and synchronizing or grouping cows so multiple cows are in heat at one time are strategies that can improve heat detection on dairies.