Herdmate's Reproductive Status Influences Heat Detection

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University of Kentucky research indicates the reproductive status of a dairy cow influences the chance she will interact with a cow in heat. If a cow is in standing heat or was in heat yesterday or will be in heat tomorrow, she is the most likely herdmate (62% chance) to mount a cow in standing heat. A cow who is in the first half of her estrous cycle (days 2 to 10) is more likely to mount a herdmate in heat than a cow who is in the second half of her cycle (days 11-19, 25 vs. 5% chance). Pregnant cows are not very interested (12% chance) in mounting a herdmate in heat.

These results show heat detection efficiency can be influenced by the number of herdmates who are near or in heat, pregnant, in the first half of their cycle, in the last half of their cycle, etc. The number of herdmates or "groupmates" in these reproductive states is influenced by herd size, number of groups per herd and seasonal breeding. The practical implication is if groups/herds are small or a small percentage of the group is "sexually active," heat detection becomes an even more difficult job and deserves increased attention by management.

Two techniques which help manage around this challenge are synchronizing estrus and utilizing an androgenized animal. Synchronizing estrus is a good way to get cows to come in heat at about the same time. "Monday Morning" prostaglandin programs have become a popular synchronization method to use with cows. Normal open cows which need to be bred are injected with one of the prostaglandin $F_{2\alpha}$ products on Monday morning, watched very closely for heat on Wednesday, Thursday and Friday, and inseminated at the correct time after they have been seen in heat. Placing an androgenized animal in the herd which is always interested in interacting with cows in heat improves the chance of catching cows in heat.

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