

# Heat detection in cows uses hormones for bullish results

COLLEGE PARK — With herd sizes increasing, it becomes more difficult to establish and maintain a good program for successful detection of heat, says Roy L. Ax, Extension Dairyman, University of Wisconsin.

Every dairyman must have some method for identification of each animal. Also, accurate records must be kept of animals that were observed in heat.

Heat occurs approximately every 21 days until an animal becomes pregnant. The hormone estrogen is produced by the ovary to cause the behavior known as standing heat.

Standing heat lasts 10-18 hours, and the egg is released 10-12 hours after the end of standing heat.

Behavioral changes commonly occurring during heat are restlessness, bawling, walking, nudging, sniffing, standing up when others are lying down, mounting other cows, and standing for other cows that may be in heat. If animals are allowed to interact in a group (preferably away from feed) as a daily routine, it becomes easier to see some of these behavioral changes.

Unfortunately, 68% of activity associated with heat occurs between 6 p.m. and 6

a.m. Two or more animals in heat at the same time tend to find each other. Two animals in heat attempt four times as many mounts as only one animal in heat.

One method to guarantee that one animal is always aggressive utilizes hormonal injections of the male hormone testosterone. Dr. Jack Britt from North Carolina State University, pioneered most of these studies.

A dry cow or heifer is selected to receive the treatment. After the injections, she behaves more like a bull. She then is used in a group situation where she can interact with the rest of the herd. The frequency of mountings increases, thereby increasing the

chances for someone to determine which animal or animals are in heat.

Masculinized cows or heifers are not dangerous like a bull. More important is the fact that when they mount cows in heat, there is no danger of spread of disease that can occur with a penis.

When fitted with a chin-ball marker and permitted to remain with the rest of the herd, these animals can be a real asset to a heat detection program, Ax said.

The current DHI position on a cull cow is that these are dry cows. If they improve heat detection and shorten the calving interval, they should pose no significant threat to affecting rolling

herd average.

The recommended administration of the hormone as published by Dr. Britt's laboratory follows:

Inject animal intramuscularly with 200 mg testosterone propionate in corn oil every other day for 20 days. This is the induction treatment.

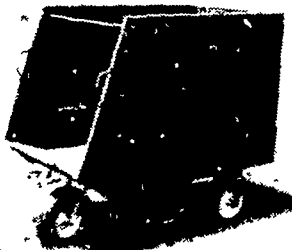
Two to three days after termination of the induction treatment, the maintenance treatment begins. 500 mg of testosterone propionate in corn oil is injected subcutaneously every 2-3 weeks for as long as the animal is desired to detect heat. Some persons prefer implants of Synovex-H for the maintenance treatment. These work for 4-6 months.

Use a chin-ball marker for best results. Use a docile animal because it must be handled frequently to fill the marker and give injections.

Milking animals should not be used. Dry off cull cows before starting hormone treatments. It is illegal to ship milk from testosterone treated cows. Consult with a veterinarian.



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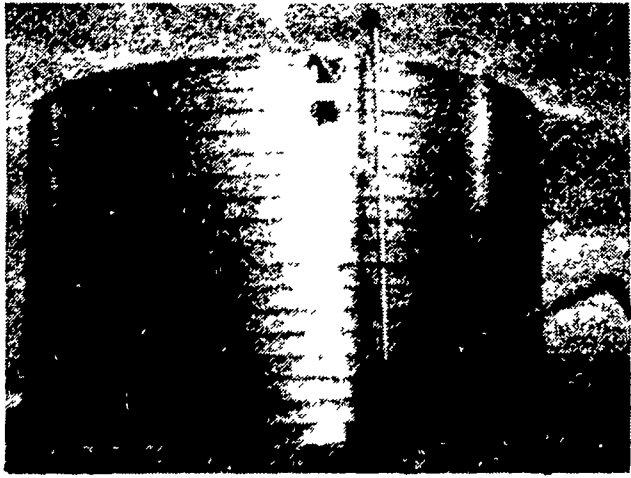
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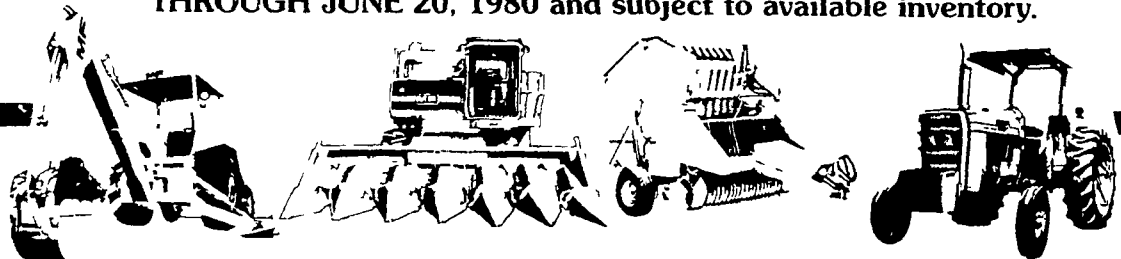
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