BY SALLY BAIR Lancaster Co. Correspondent

LANCASTER — With family dairy farms facing difficult economic times, the need for increased profitability becomes critical. Austin Belschner, D.V.M., a partner in the Cumberland Veterinary Clinic in Barron County, Wisconsin, has developed a controlled breeding program to increase reproductive efficiency.

Speaking to dairymen at Lancaster County Dairy Days, sponsored by the Penn State Cooperative Extension Service, Belschner said that getting cows bred is the single most important concern in the breeding program. He said that most causes of anestus, or non-cycling, are management deficiencies, and heat detection is the primary reason for breeding failures in herds using AI.

Emphasis in Belschner's twoweek program is on regularly scheduled two-week fertility examinations, excellent nutrition, prostaglandin shots for most animals and breeding only on standing heat. He said, "The program is designed to take the failures out of the program. It takes less management time rather than more."

While prostaglandin is a drug that has been available for a long time, its effectiveness on dairy animals has not been proven, Belschner said. The primary reason it hasn't been used extensively on dairy animals is that it was tested first on dairy heifers and beef, two groups in which artificial insemination had not been routinely used, and two groups which suffer from poor nutrition. Belschner's program consists of herd health visits every 14 days, with all cows examined post freshening, at about 14 days. At 45 days fresh the cow becomes a candidate for re-breeding. Animals are palpated and injected if a functional corpus luteum is present. Heat detection begins 24 hours after the prostaglandin injection.

The two week schedule called for under the program allows a concentrated heat detection schedule which minimizes the actual time dairymen spend observing heats. It is concentrated in two four-day periods per month. Belschner insists that cows be let out of the barn a minimum of once a day during the four-day period for observation, and suggests twice a day during day three and four. Breeding is done only following standing heat.

When the whole herd is involved in the project, more cows are active at the same time, allowing easier detection. If a cow is not observed in standing heat, she will be re-examined on subsequent visits and re-treated with prostaglandin. Again, she will be bred only on standing heat. If a third injection is required, she will be bred at 80 hours post-injection.

Belschner told the dairymen that each day a cow is open costs him \$5. In Wisconsin the average calving interval is 13 months.

For his original study, Belschner used six family farms that averaged 45 milking head, and used only those with adequate records to allow comparison. One herd was dropped because the cows were not let out in the winter months, and one because some breeding had been done by a cleanup bull and records were not accurate.

The herds in the study had a history of being open for 107.9 days on average. This interval was reduced to 91.1 days during the study. In the first two years of the study, the herds also averaged 1.5 services per conception, an improvement of .6, and averaged 64 percent first service conceptions.

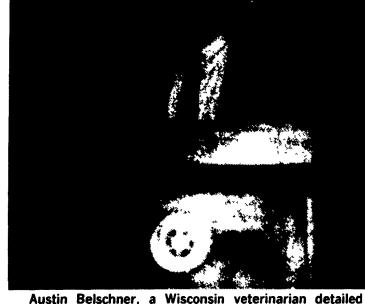
The results of his study showed a return of four to one on the money invested, and the cull rate decreased by 50 percent. Belschner said dairymen are now able to cull from the low end, and the program has decreased the need to cull high-producing cows which were problem breeders.

A side benefit of the controlled breeding program is that the whole herd health program benefits because problems are dealt with more quickly since the visits are every two weeks rather than the traditional monthly visits. Cystic cows are diagnosed and treated earlier and forced culls are decreased.

Belschner stressed that the program works only if there is a team approach to dairying. He said the dairymen, the feed mill, nutritionist and veterinarian must all work together for the good of the herd. Belschner added, "There is only one nutrition goal. That is improved profits through improved health and reproduction, decreased feed costs and increased production."

He encouraged dairymen to try the program to ssee if it's a workable program for them.

Belschner said, "Family dairying is going through difficult times. In Northwestern Wisconsin,



Austin Belschner, a Wisconsin veterinarian detailed a controlled breeding program which decreased services per conception in Wisconsin by emphasizing regular two-week fertility examinations.

we are in danger of losing our town as well." He called the family dairy farm "amazingly efficient and powerful" and said the talk of getting bigger is a "bunch of nonsense."

He urged farmers to keep their resources in balance, using land, feed, labor and people resources wisely while living within the limits of technology.

Because of the decreasing numbers of dairy cows in their clinical practice he said he and his partners decided to work on client profitability through improved breeding, good nutrition and somatic cell counts. "If we can deal preventably, we can minimize problem calls. We are putting clinical emphasis on helping you be profitable."

In addition to the controlled breeding program, Belschner discussed nurition for first-calf heifers whose reproduction falls

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