The Art of Cow Tipping

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Have you tipped any cows lately? Cow tipping has become quite the rage. Yes, I said cow tipping! If you type "cow tipping" into Google.com (a web search engine) you will find at least 8000 different web sites that deal directly with cow tipping. Unfortunately, after sifting through all 8000 sites, I did not find one site that referred to cow tipping as a way to reward a cow for a job well done. I'm sure you've tipped a waitress for a job well done. Right? But, are you rewarding your cows for a job well done? Well, as it turns out, cows that get tipped the best are most likely from the best managed herds.

These herds produce more milk and more milk equals more profit according to Michigan's 2001 Telfarm data. Net farm income per cow increased linearly from $524 to $879 as production increased from 19,000 to 29,000 lbs of milk sold/cow/year. We are pushing the limits of genetic potential more than ever. Recombinant bovine somatotropin (bST), three and four times-a-day milking, increase in genetic merit, and new technologies will continue to push the limits of milk production of dairy cows. The question is: Are you giving your cows the TLC they need to be all they can be? Are you tipping your cows?

There are a number of herds reaching the 30,000 lb mark and beyond. Are these herds reaching these milestones genetically or by more intensive management? Interestingly, the difference in milk production due to genetics in a 15,000 vs 30,000 lb herd is only about 1000 lb. The remainder of the difference is primarily due to management. In other words, there is a lot of potential milk to be made by intensifying the management of our herds. Does this mean that genetics is not important? Absolutely not! An additional 1000 lbs of milk each year amounts to about $120 per cow and it is a permanent increase in production. That is a significant amount of the margin of profit in many herds.

Milk production and reproduction go hand in hand

Several studies during the past two decades indicate that the greater the herd milk production the greater the difficulty getting cows pregnant. But, does that mean the highest producing cows in a herd are the most difficult to get pregnant? Not necessarily! Recent data from our laboratory indicate otherwise (Peters and Pursley, 2000). In a study designed to test a modified version of Ovsynch vs. Ovsynch, we found some very interesting information in the relationship between milk production and fertility. Conception rates between the modified version of Ovsynch and Ovsynch were similar. To look at the relationship between milk production and reproduction, we divided the entire group based on average daily milk production per cow from data collected from the nearest test day. Artificial insemination (AI) was performed within 2 weeks of a test day. All data were from 1st inseminations between 65 and 71 days in lactation. The bottom line: Cows with above average milk production had greater conception rates than cows below average production (Table 1). Why? Most likely because they were healthier, and

most likely because more of the cows in the below average group may have had a health-

Table 1. Relationship of milk production and conception rates in lactating dairy cows.

Parity	High	Low	Total
First(%)	59.7* (n = 67)	37.3 (n = 75)	48.2 (n = 142)
Second(%)	35.6 (n = 55)	43.4 (n = 53)	38.9 (n = 108)
Third +(%)	42.4* (n = 92)	24.7 (n = 85)	33.9 (n = 177)
Total	45.8* (n = 214)	33.8 (n = 213)	39.9 (n = 427)

[a]Data grouped by peak daily milk production above the parity mean (High) or below parity mean (Low). First parity: < 75 pounds/day = Low and ≥ 75 pounds/day = High. Second parity: < 109 pounds/day = Low and ≥ 109 pounds/day = High. Third+ parity: < 110 pounds/day = Low and ≥ 110 pounds/day = High.

related problem either at calving or in early lactation.

There are two ways that reproduction can affect milk production: 1) Reproductive disorders may decrease peak milk yield, and 2) reproductive inefficiencies such as poor detection of estrus and conception rates extend lactation, dry period, and calving interval.

Reproductive disorders that may reduce peak milk production (1) include: twinning, stillbirth, dystocia (difficult births), retained placenta, metritis, and pyometra (uterine infection). Even cows with ketosis and displaced abomasums have a greater chance of having a uterine infection (1).

Of these disorders, twinning may have the most profound effect on subsequent milk production and reproductive performance. Cows that have twins have a greater likelihood of retained placenta, metritis, pyometra, a reduction in peak milk, and a greater potential for breeding problems (1,2). Even cows with ketosis and displaced abomasums have a greater chance of having a uterine infection (1).

A number of dairy herds have had a substantial increase in twins over the past few years. Data from Wisconsin suggest that increased twinning is tied to an increase in milk production via an increase in double ovulations. Most of the problems associated with twinning can be attenuated by intensifying the management of cows carrying twins. Thus, preparing cows carrying twins for the subsequent lactation is of paramount importance. Knowing which cows are pregnant with twins is obviously important. If your veterinarian is not already looking for twins at pregnancy diagnosis, this may be something you will want to request. A number of veterinarians are using ultrasound with a 5 MHz transducer for pregnancy diagnosis for greater accuracy of diagnosis, and because ultrasound allows much easier diagnosis of twins compared to palpating. Right now, there is no way to decrease numbers of double ovulations, but there are a few things that can be done to get these cows off to a better start. Once cows carrying twins are identified, this information can be used to ensure sufficient time in the pre-fresh group

(remember cows that have twins usually calve early), to ensure cows are at the ideal body condition score at calving (cows carrying twins are generally too thin at calving), and to ensure the cow will be taken care of properly at the time of calving. Diet and management of bST in late lactation is important not only in cows carrying twins, but in other cows that may be too fat or too thin at that time. Disorders that arise from calving difficulties such as metritis and pyometra may sometimes be unavoidable. But, most cases can be avoided by proper cleaning and sanitation of calving pens.

In summary, spend a little of that hard earned money in the form of a gratuity for your cows. Give them the treatment they deserve and in return they will take care of you. Milk production and reproduction go hand in hand. Take care of the management strategies that improve reproduction, and in turn, milk production, cow health and happiness will be maximized.

References:

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