# **COW/CALF CORNER**

The Newsletter
From the Oklahoma Cooperative Extension Service

August 15, 2008 In this issue:

#### There Is No Free Lunch

Derrell S. Peel, OSU Livestock Marketing Specialist

#### **Predicting Time of Calving**

Glenn Selk, OSU Extension Cattle Reproduction Specialist

### There Is No Free Lunch

Derrell S. Peel, OSU Livestock Marketing Specialist

The saying that "there is no free lunch" may well be the most widely understood economic concept and perhaps the only thing that many people remember from economics class. However, in the turmoil that we are experiencing in agricultural markets, there is no more critical lesson to keep in mind than this one. "No free lunch" means that there are always tradeoffs for everything. Completely accounting for what you have to give up in order to have something else is what economists call opportunity cost.

In some cases, the money you have to give up to buy a product (as a consumer) or an input (as a producer) represents most or all of the opportunity cost of that product. You have to give up whatever else you could have bought with that money. In other cases the explicit monetary cost may only be part of the full opportunity cost of a product. In other words, the tradeoffs are the real cost of things. Sometimes the tradeoffs are obvious and other times much more indirect.

We can think of tradeoffs in three broad categories. The first is "output to output". In other words, choices between alternatives for production. For example, there is no doubt that we can grow enough corn to meet increased demand for ethanol along with other uses. However, since there is not vast supply of unused agricultural resources, increased corn production costs land, fertilizer and other inputs that could have been used to produce soybeans and other crops.

The second type of tradeoff is "input to input". When the price of an input increases we look for cheaper alternatives. Thus, high fertilizer price makes other nutrient sources, like animal manure, more attractive. In the case of cattle, high feed-grain prices makes forage more attractive. The third type of tradeoff is "input to output". High input prices (relative to output price) leads to reduced input usage (and less output produced). High fertilizer price suggests that producers should use less fertilizer. High feed-grain price means that feedlots should use less grain to feed cattle.

It should be obvious in all of these examples that it is relative prices that drive decision-making. It does not matter what the absolute price of corn is; it matters what corn price is relative to soybean and other crop prices that will determine how we allocate land and other resources to corn and soybean or other crop production. It is the relative price of corn to by-products or forage that determines how much corn will be used for animal feed. It is the price of fertilizer relative to the value of crop production that determines how much fertilizer will be used. In this period of transition, we will continue to see much volatility and uncertainty about these relative prices. Eventually values will adjust relative to what consumers want and are willing to pay for and producer margins will stabilize. In the meantime, not only is the lunch not free, it is very difficult to figure just how much it does cost.

## **Predicting Time of Calving**

Glenn Selk, OSU Extension Cattle Reproduction Specialist

One of the advantages of fall-calving compared to spring (late winter) calving is the pleasant weather that the cow calf operator finds at 2:00 AM when he or she goes out to check the heifers. The downside of fall calving is the fact that these cows and heifers are not being fed from the truck or hay feeder. In most years, they are getting plenty of nutrition from the standing forage in the pasture. Therefore, the rancher will have less influence on the time of day that the cow goes into labor. As has been documented many times, if the cows are fed late in the day, a higher percentage of calves will come during daylight hours.

Very precise records about the previous history of adult cows may give some help to that portion of the herd. Oregon State and Utah State Universities conducted an interesting study to determine whether individual beef cows display a repeatable pattern of calving time from year to year. Cows in this study ranged from 3 to 7 years of age and the number of calvings per cow ranged from 2 to 5, resulting in 523 parturitions for 201 individual cows. This data was gathered in late winter/spring calving seasons which began in late January and ended in late April. Cows were fed each day in late afternoon. Days were divided into 6 periods of 4 hours each. The percentage of cows calving within each period was: 6 AM – 10 AM, 34.2%; 10 AM – 2 PM, 21.2%; 2 PM – 6 PM, 29.8%; 6 PM – 10 PM, 8.4%; 10 PM – 2 AM, 4.4%; and 2 AM – 6 AM, 1.9%. By feeding late in the day, 85.2% of the calves came between 6 AM and 6 PM.

Average time of day of calving was determined for each cow. The difference between the individual's average and her calving time for each year was then calculated. The average difference for all cows was plus/minus 2.65 hours. Statistical analysis confirmed the average difference was significantly less than 3 hours. These results indicated that for this herd of cows, which was fed in late afternoon, the time that calving will occur may be predicted within about 2 to 3 hours based on the average time of day that a cow had previously calved. The authors noted, however, that alteration of feeding time could affect the predictability of calving time. Unfortunately, two-year olds do not have previous records to predict their calving time. (Source: Jaeger co-workers. 2002. Proc. Western Section American Society of Animal Science, 53:204.)

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.