

# **COW/CALF CORNER**

The Newsletter

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Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

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## **Agricultural Data is More Important than Ever**

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

U.S. agriculture has seen tremendous changes and challenges in recent years. Unprecedented new demands for agricultural products have caused significant changes in crop production and have provoked huge impacts on livestock production. Input market shocks, dynamic global markets and drought have all contributed to volatile short term market conditions. The changes and impacts are not merely short term in nature. There are long term structural implications to

these changes that will impact what will be produced and where and how it will be produced. These changes have implications, not only for agricultural producers but also for consumers. Food price impacts of changes the last six years are just beginning to be manifest in the consumer marketplace. All of these factors imply that much information will be needed to understand the changes and implications of those changes on the U.S. food and fiber system.

Agricultural producers across the country are in the process of completing the 2012 Census of Agriculture survey. For many producers, this periodic survey is the only time they are asked directly to provide data about their operations. Given the expected changes in agriculture that are in progress since the 2007 survey, this Census of Agriculture is particularly important to begin documenting the long term structural change underway in U.S. agriculture. It is vitally important for producers to provide complete and accurate information to support research, analysis and decision-making that will affect all producers and consumers in U.S. food markets.

The Census of Agriculture is just one small piece of the U.S. agricultural data system that provides vital information for a vast array of data users and decision-makers on a daily basis. From the daily reporting of agricultural market prices to daily, weekly, monthly and annual data on production, trade and consumption, millions of users rely, either directly or indirectly, on data provided by a variety of government agencies. It is easy to take the data for granted. Many producers do not access the data directly and may not fully appreciate the degree to which the information and analysis that they do use depends on government data. USDA's National Agricultural Statistics Service (NASS) and the Agricultural Marketing Service (AMS) are the two agencies for whom data is the primary agency mission but data is provided by a variety of other agencies as well.

The U.S. agricultural data system is under threat. Amid the budget realities and discussions of priorities in government, data is often overlooked and much of the current data system is under consideration for reduction or elimination. Failure to recognize the longer run benefits of a strong data system against the short run budget savings of cutting data programs has enormous implications, not only for producers but for society at large. The public good nature of agricultural market information has been well documented for many years. Providing better information with which producers can make better decisions makes markets more efficient, reduces food costs and benefits all consumers. The cost of even a short term disruption in major data series is extremely high.

U.S. agriculture is changing with many new challenges and opportunities. At stake is the integrity of the U.S. food and fiber system. The value of agricultural information is arguably higher now and in the coming years than it has been in the past couple of decades. The U.S. has

made a large investment in a world class agricultural data system. This has paid tremendous dividends in the past and the consequences of not maintaining it in the future are even greater.

## **The 3 Stages of Parturition (Calving)**

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Before the first heifer begins the calving process this spring, it would be wise to review what takes place in a normal delivery. Understanding “normal” will help us better recognize problems when they occur and therefore provide assistance when necessary.

### **Stage 1**

The first stage of parturition is dilation of the cervix. The normal cervix is tightly closed right up until the cervical plug is completely dissolved. In stage 1, cervical dilation begins some 4 to 24 hours before the completion of parturition. During this time the “progesterone block” is no longer present and the uterine muscles are becoming more sensitive to all factors that increase the rate and strength of contractions. At the beginning, the contractile forces primarily influence the relaxation of the cervix but uterine muscular activity is still rather quiet. Stage 1 is likely to go completely unnoticed, but there may be some behavioral differences such as isolation or discomfort. At the end of stage one, there may be some behavioral changes such as elevation of the tail, switching of the tail and increased mucous discharge. Before “pulling” a calf in stage 2, it is imperative that stage 1 (cervical dilation) is complete.

### **Stage 2**

The second stage of parturition is defined as the delivery of the newborn. It begins with the entrance of the membranes and fetus into the pelvic canal and ends with the completed birth of the calf. So the second stage is the one in which we really are interested. This is where all the action is. Clinically, and from a practical aspect we would define it as the appearance of membranes or water bag at the vulva. The traditional texts, fact sheets, magazines, and other publications that we read state that stage 2 in cattle lasts from 2 to 4 hours. Data from Oklahoma State University and the USDA experiment station at Miles City, Montana, would indicate that stage two is much shorter being approximately 60 minutes for heifers and 30 minutes for cows. In these studies, assistance was given if stage two progressed more than two hours after the appearance of water bag at the vulva. The interesting thing about the data was that heifers calving unassisted did so in an hour after the initiation of stage two and cows did so within 30 minutes of the initiation of stage two. Those that took longer needed assistance. These and other data would indicate that normal stage two of parturition would be redefined as approximately 60

minutes for heifers and 30 minutes for adult cows. In heifers, not only is the pelvic opening smaller, but also the soft tissue has never been expanded. Older cows have had deliveries before and birth should go quite rapidly unless there is some abnormality such as a very large calf, backwards calf, leg back or twins.

### **Stage 3**

The third stage of parturition is the shedding of the placenta or fetal membranes. In cattle this normally occurs in less than 8-12 hours. The membranes are considered retained if after 12 hours they have not been shed. Years ago it was considered necessary to remove the membranes by manually “unbuttoning” the attachments. Research has shown that manual removal is detrimental to uterine health and future conception rates. Administration of antibiotics usually will guard against infection and the placenta will slough out in 4-7 days. Contact your veterinarian for the proper management of retained placenta.

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