## COW/CALF CORNER

The Newsletter

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## The evolving role of Canadian and Mexican cattle and beef trade

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

The most recent monthly trade data provides an update to recent cattle and beef trade flows in North America. They emphasize the longer term evolution and change in the roles of Canada and Mexico in North American and global markets. Cattle and beef trade flows between the U.S., Mexico and Canada are increasingly complex and represent an ever more integrated North American market. Canada and Mexico are both major beef import sources and destinations for U.S. beef exports.

Canada has historically been viewed as primarily a beef exporting country. However, in recent years, Canadian beef exports have decreased to a point where Canada is much closer to a balance between beef imports and exports. Canada remains a significant net exporter of live cattle to the U.S. In the latest November data, U.S. beef exports to Canada were down 12.2 percent from last year, contributing to a 22.5 percent year over year decrease in the first eleven months of the year. November U.S. imports of Canadian beef were up 13.9 percent from 2013 levels, part of an 11 percent year to date increase compared to a year earlier. U.S. imports of Canadian cattle were up 42.2 percent in November, contributing to a 22.1 percent year over year increase for the January to November period. These cattle imports consist of feeder cattle, up 46.5 percent year over year, including a 77.2 percent increase in November; and slaughter cattle (both fed cattle and cull cows/bulls), which were up 20 percent in November and 8.5 percent for the year to date.

Trade flows between the U.S. and Canada are quite flexible between feeder cattle, fed cattle and beef, adjusting as needed according to market and political factors. Several economic factors are drivers of U.S. and Canadian cattle and beef trade including 1) beef product flows to improve the match between supply and demand of particular beef products; 2) geography and transportation

efficiencies of north/south versus east/west shipping in both countries; 3) relatively abundant resources for feeder cattle production in Canada; and 4) the infrastructure challenges and issues of competitiveness in Canadian feeding and packing sectors. At times, cattle feeding in Canada is very competitive to the U.S. and at other times less so. These conditions result in changing proportions of feeder cattle exported to the U.S. compared to fed cattle. Despite increased packing infrastructure after BSE in 2003, Canada continues to struggle with packing cost competitiveness due to higher environmental and labor costs, and a general shortage of labor for processing. Exchange rates often have a significant impact on the relative values of outputs and inputs in the U.S. and Canada.

Mexico has long been recognized as a source of feeder cattle imports into the U.S. based on a comparative advantage in cow-calf production which continues to this day. In the past 20 years, Mexico has been a significant importer of beef, and has been one of the top markets for U.S. beef exports. These Mexican beef imports have been driven by a variety of factors over time including; increased beef supply to supplement deficient beef production in Mexico; augmenting supplies of specific beef products that are more preferred in Mexico; and the extreme price competitiveness of certain U.S. beef products due to the enhanced value differentiation of U.S. boxed beef products compared to the Mexican beef carcass system. Most recently, significant growth in Mexican cattle feeding and packing infrastructure and, importantly, the conversion of much of the Mexican beef market to boxed beef in place of carcasses, has significantly changed the economic basis for U.S. and Mexican beef trade. The recent adoption of boxed beef technology in Mexico allows for significant value differentiation and enhancement in the Mexican market and also opened the doors for Mexico to export beef. Mexico can no longer be viewed as primarily a beef importer as exports have grown to nearly match imports. Mexican beef exports have grown sharply the past five years, including exports to the U.S. Mexico has been the fourth largest source of U.S. beef imports since 2010.

In November, U.S. imports of Mexican beef were up 20 percent, matching the year over year increase for the January to November period. November imports of Mexican beef were nearly equal to U.S. exports of beef to Mexico, which were down 18.3 percent compared to the same month in 2013. For the year to date through November, U.S. imports of Mexican beef were up 20.1 percent and U.S. beef exports to Mexico were up 10.8 percent form one year earlier. U.S. imports of Mexican feeder cattle were up 5.8 percent year over year in November with a year to date total that was up 13.4 percent compared to the previous year.

The U.S., Mexico and Canada have all reached a point where beef imports and exports are relatively balanced in each country, at least in quantity terms. Beef trade flows are more integrated and more subtle now, driven by opportunities to enhance product values based on preferences in the three countries and relatively less by the broader deficits and surpluses in consumption and production that previously defined beef trade. Relatively abundant forage resources in Canada and Mexico, along with the U.S., is the principal factor that ensures that cattle production will continue to be an important activity in North America. Unimpeded cattle and beef trade that permits markets to optimize value is a benefit to the cattle and beef industries in all three countries.

## The 3 stages of parturition

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

As the spring calving season approaches, an increased understanding of the parturition process is helpful. The more we understand about the physiology of the process, the more likely we are to make sound decisions about providing assistance. Parturition or "calving" is generally considered to occur in three stages.

**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 2 to 24 hours before the completion of parturition (2 to 6 hours would be most common). 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 come behavioral changes such as elevation of the tail, switching of the tail and increased mucous discharge. Also relaxation (softening) of the pelvic ligaments near the pinbones may become visually evident, giving a "sunken" appearance on each side of the tailhead. <u>Checking for complete cervical dilation is important before forced extraction ("pulling") of the calf is attempted.</u>

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 we find all of the action. Clinically, and from a practical aspect we would define the beginning of stage 2 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 5 hours. As was illustrated in last week's newsletter, data from Oklahoma State University and the USDA experiment station at Miles City, Montana, would indicate that stage two is MUCH shorter. 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 the heifers calving unassisted, did so in about one hour after the initiation of stage two, and mature cows calved within an average of 22 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. If the cow or heifer is making good progress with each strain, allow her to continue on her own. Know your limitations. Seek professional veterinary help soon if you encounter a problem that cannot be solved easily in minutes.

**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 to12 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 can be detrimental to uterine health and future conception rates. Administration of antibiotics usually will guard against infection and the placenta will slough out in 4 to 7 days. <u>Contact your veterinarian for the proper management of retained placenta.</u>

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