Large feedlot inventories to start 2020
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The latest monthly cattle on feed report showed the January 1 inventory in feedlots (over 1,000 head) at 11.958 million head, 102.3 percent of one year ago. This is the largest January on-feed total since 2008. Placements in December were up 3.5 percent year over year, the highest December level since 2011. December marketings were 5.3 percent higher year over year, the largest level since December 2010. December 2019 had one additional business day compared to a year earlier making daily average marketings for the month about equal to 2018. The January cattle on feed report was well anticipated with placements, marketings and on-feed totals all close to pre-report expectations. The report is not expected to provoke much market response.

December feedlot placements consisted of 5.3 percent more cattle over 700 pounds compared to one year ago and 1.7 percent more year over year for cattle under 700 pounds. In fact, in the last four months, total placements have increased 5.3 percent year over year with placements of cattle over 700 pounds up 7.8 percent year over year and cattle under 700 pounds up 2.5 percent over last year. These heavyweight placements represent much of the feedlot supply that will be marketed in the first quarter of 2020.

Among major feeding states, current feedlot inventories are shifted to the southern plains and mountain states with lower feedlot totals in the Midwest and northern plains. January feedlot inventories were up year over year in Texas (108 percent of last year); Colorado (108 percent); Kansas (104 percent); and Oklahoma (105 percent). Feedlot inventories are lowest in Nebraska (96 percent of last year); Iowa (97 percent) and South Dakota (100 percent).

With total cattle inventories at or just past a cyclical peak, feedlot inventories will likely peak in the next few months. However, average feedlot inventories are currently record large. After
peaking last August then declining for two months, the twelve-month moving average of feedlot inventories moved higher the last three months and is currently at 11.639 million head, record large for the current data series back to 1996. The twelve-month moving average removes seasonality and allows month-to-month comparisons of annual average feedlot inventories.

The January Cattle on Feed report also contained quarterly numbers of steers and heifers on feed. The inventory of steers on feed was 7.373 million head, up 1.3 percent year over year and the highest January level since 2008. Steer inventories declined year over year each quarter in 2019 but picked back up in the latest report. The inventory of heifers on feed was 4.585 million head in this latest report, up 4.0 percent year over year and the largest January heifer inventory since 2001. Heifer feedlot inventories increased year over year starting in April 2016 and has been larger each of the last 16 quarters.

Cattle slaughter is expected to decrease in 2020, including a slight year over year decline in steer and heifer slaughter and lower cow slaughter. However, large current feedlot inventories confirm that slaughter will be higher early in the year before decreasing in the second half of 2020. Total annual beef production is expected to be slightly higher year over year as heavier carcass weights offset lower slaughter. Beef production in the first half of the year will be higher on increased slaughter and larger carcass weights before lower slaughter pulls beef production down late in the year.

**Lengthy, difficult births adversely affect newborn calves**

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Calves born after a prolonged, difficult birth are at a high risk of failing to receive adequate colostrum by natural suckling because of greatly decreased colostrum intake. Calves failing to receive adequate colostrum in a timely manner are more prone to diseases such as scours, and respiratory diseases later in life. Calves that are born to a prolonged stage 2 of parturition very often suffer from severe respiratory acidosis. Stage 2 is defined as the period of labor from first appearance of the water bag until the calf is completely expelled and on the ground.

The acidosis occurs as the umbilical cord is pinched off at the pelvic rim during delivery. Therefore the flow of oxygen from mother to calf and the return of carbon dioxide from calf to mother is impaired. The buildup of carbon dioxide and its byproduct lactic acid, in the blood of the newborn causes the blood pH of the calf to be lowered and therefore the calf suffers from acidosis. Severe acidosis and low blood oxygen may cause damage to major organs of the calf including the brain. Some ranchers may have observed calves that seem to be abnormal in behavior and are often called “dummy” calves.

Calves that have endured a lengthy stage 2 of delivery and are suffering from severe acidosis often are very sluggish and are VERY slow to stand up, find the mother’s teat, and nurse. This delay in ingestion of the colostrum leads to poorer immunoglobulin absorption because of normal intestinal closure. Immunoglobulin is a big word for the large proteins that are “disease-
protecting antibodies”. In addition “acidotic” calves are less efficient at absorbing colostral immunoglobulins even if artificially fed colostrum. Therefore efforts should be made to provide weak newborn calves with the best source of colostrum available via bottle suckling or tube feeding.

The amount of immunoglobulin ingested is also a major determinant of final serum immunoglobulin concentration. A practical "rule-of-thumb" is to feed 5 to 6% of the calf’s body weight within the first 6 hours and repeat the feeding when the calf is about 12 hours old. For an 80 pound calf, this will equate to at least 2 quarts of colostrum per feeding. Feed the natural or commercial colostrum first, before the calf is fed whole milk that is not colostrum. Once the calf has consumed any milk product, the intestine speeds up the process of intestinal closure, which would inhibit the absorption of antibodies from colostrum fed later.

If you have noticed a higher incidence of calf diarrhea among calves born to first calf heifers, this may be due to two reasons: 1) The calf has more severe respiratory acidosis due to prolonged stage 2 of calving, and 2) two-year-olds give smaller quantities of first milk (colostrum) than do mature cows. Properly developed replacement heifers bred to calving ease bulls should help minimize the difficult births and allow the young cow to produce her genetic maximum first milk.