COW/CALF CORNER

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The Weather is Cold but Cattle and Beef Markets are Hot

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

The holiday season is not typically a time when markets make dramatic moves. However, fed cattle prices going into Christmas were just over \$130/cwt. and emerged from New Year's at over \$137/cwt. late last week. Fed cattle prices advanced the last week of December despite a fire that idled a Cargill plant that week and further reduced holiday-diminished slaughter schedules. Choice boxed beef prices have increased roughly \$4/cwt. since before Christmas. The Choice-Select spread has also narrowed with Select increasing even more than Choice resulting in an effective average boxed beef price increase of about \$6/cwt. For packers, the increase in boxed beef is not enough to compensate for the fed cattle price increase meaning that packer margins continue to be squeezed. In the last four weeks, both cattle slaughter and boxed beef production have been down roughly 4 percent. Carcass weights are close to year ago levels, with steer and heifers carcass weights down and cow carcass weights up due to high proportions of dairy cows in the cow slaughter total.

It will likely take another week or so to fully assess post-holiday beef markets. The massive winter storm affecting the eastern half of the country this week will have additional impacts on both beef supply and demand. The fact that most major cattle feeding regions are not being affected by big snow totals will reduce the impacts but the cold temperatures and temperature swings will affect animal performance and hold carcass weights in check. Snow is heavier from the eastern corn belt through the northeast and, combined with brutally cold temperatures, will likely reduce beef demand and product movement for a few days.

Fed cattle prices have jumped much more than expected and raises the question of what to expect next. Current fed prices are already above spring prices as indicated by Live Cattle futures. Is this an early peak or can we expect additional first quarter strength in fed prices? I think it unlikely that we will see a continuation of the current rally in the next few days. Reduced slaughter and carcass weights, perhaps aggravated by weather impacts will tend to support prices

close to current levels but packers will certainly resist higher fed prices unless boxed beef continues to move higher. Fed prices may move mostly sideways for the near term but the potential exists for prices to push towards \$140/cwt by the end of the first quarter. In contrast, current April Live Cattle futures would suggest we are already at the spring peak. Boxed beef prices and winter weather will both be key factors to watch in the first quarter.

Feeder cattle markets have been mostly closed the past two weeks so market trends are difficult to assess but indications are that prices will be strong as markets reopen this week. Higher fed cattle prices are supportive, though adverse weather may temper feeder demand the next few days. Wheat pasture conditions have been marginal in some areas and may continue to deteriorate with the cold weather provoking some early movement of stockers off wheat but neither the numbers nor timing is likely to pressure feeder markets significantly.

Re-warming Methods for Cold-stressed Newborn Calves

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

The extremely cold winter nights have reminded us that spring calving season is just around the corner. More cold temperatures are likely during the upcoming calving season. Several years ago an Oklahoma rancher called to tell us of the success he had noticed in using a warm water bath to revive new born calves that had been severely cold stressed. A quick check of the scientific data on that subject bears out his observation.

Canadian animal scientists compared methods of reviving hypothermic or cold stressed baby calves. Heat production and rectal temperature were measured in 19 newborn calves during hypothermia (cold stress) and recovery when four different means of assistance were provided. Extreme hypothermia of about 86° F rectal temperature was found in the calves before re-warming was initiated. Calves were re-warmed in a 68 to 77° F air environment where thermal assistance was provided by added thermal insulation or by supplemental heat from infrared lamps. Other calves were re-warmed by immersion in warm water (100°F), with or without a 40cc drench of 20% ethanol in water. Normal rectal temperatures before cold stress were 103 °F. The time required to regain normal body temperature from a rectal temperature of 86°F was longer for calves with added insulation and those exposed to heat lamps than for the calves in the warm water and warm water plus ethanol treatments (90 and 92 vs 59 and 63 minutes, respectively).

During recovery, the calves re-warmed with the added insulation and heat lamps used more stored body energy to produce heat metabolically than the calves re-warmed in warm water. Total heat production from body stores during recovery was nearly twice as great for the calves with added insulation, exposed to the heat lamps than for calves in warm water and in warm water plus an oral drench of ethanol, respectively. By immersion of extremely cold stressed calves in warm (100 °F) water, normal body temperature was regained most rapidly and with minimal metabolic effort. No advantage was evident from oral administration of

ethanol. When immersing these baby calves, do not forget to support the head above the water to avoid drowning the calf that you are trying to save.

Of course the calf must be dried off before returning the cold weather outside. Time honored methods such as drying the calf off with the gunny sack and then putting them under a heat lamp or in the floorboard of the pickup cab will still be helpful to many calves born in cold weather. These methods may not re-warm the calf as quickly or be quite as effective for the severe case of hypothermia. The source of research cited is Robinson and Young from the Univ. of Alberta in the 1988 Journal of Animal Science.

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