

COW/CALF CORNER

The Newsletter

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In this Issue:

Demand is Still the Key

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

How Hot is Too Hot?

Dave Sparks DVM, Oklahoma State University Area Extension Veterinarian

Can We Select Cattle to Reduce Pinkeye Incidence??

By Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Demand is Still the Key

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

Cattle and beef markets are still struggling to get on the same page. Fed cattle markets are groping for a summer bottom amidst seasonally large slaughter and beef production. Meanwhile feeder markets appear to have found a bottom after being on the defensive since February. Of course, part of the reason is that fed and feeder markets are looking at different factors at different points in time.

Feeder cattle markets have been focused heavily of new crop corn prospects for several weeks. Feedlots have looking for feed price relief for the coming crop year relative to the drought driven record corn prices of the last year. Feedlots have taken advantage of significantly lower feeder cattle prices the last three months to increase placements, year over year, in March and April and maintain a large, though slightly down, placement level in May. Feeder markets are strengthening now based on better demand, ala feed prices this fall, and tightening of feeder supplies. Improved feed prices will likely be offset by higher feeder prices this fall. Strong feedlot placements the past three months has surely utilized the slightly larger feeder supplies indicated on January 1 and likely some of the heifers intended as replacements this year. Feeder supplies will tighten considerably in the second half of the year with reduced feeder cattle imports and a smaller 2013 calf crop. The possibility of heifer retention restarting again this fall could further tighten feeder cattle supplies late in the year.

Fed cattle markets are most concerned now with current beef production and movement of animals through the feedlots this summer and fall. The summer low for fed cattle can occur anytime from now until Labor Day so it is hard call the low yet with so much summer left. Fed

cattle prices will take their cue from boxed beef prices this summer, especially as the seasonal peak in beef production passes moving into the third quarter. That said, the placement of relatively large numbers of heavy feeders recently will keep third quarter beef production higher than earlier expected. The May placements, in particular, included large numbers of very heavy feeders that will finish in the third quarter.

The above situation means that summer beef demand will be critical for the fed cattle market. Choice boxed beef has dropped about \$10/cwt. from the pre-Memorial Day high. From a different perspective, you can say that Choice boxed beef is currently holding at levels above anytime last year despite a so-so Memorial Day holiday and continued stormy weather in many regions. A strong July 4 holiday, which is likely to be an extended weekend for many, may do a lot to help beef demand in July. Beef is also receiving some help from stronger pork and poultry prices recently. Several other factors may help as well. There are indications that beef exports have strengthened somewhat recently though the lags in data mean that we won't know for sure for a while. Also, there are signs that cow slaughter, especially beef cow slaughter, is pulling back. This will support beef trimming prices and may also support Chucks and Rounds relative to summer hamburger demand.

How Hot is Too Hot?

Dave Sparks DVM, Oklahoma State University Area Extension Veterinarian

All good stockmen are aware that heat stress can be a problem in livestock as the summer heats up, but not all are aware that other factors can enter the equation besides the thermometer reading. These same factors can be dangerous to the people that handle the livestock as well, but we can do things that help to compensate for the danger. When our bodies cannot dissipate heat adequately to maintain a normal body temperature we retreat to the air conditioner, drink more water, or go to the shade. These options may not be available to our livestock.

One factor that affects the danger level for heat stress greatly is humidity. As shown in the accompanying table, temperature levels that may not pose a threat at lower humidity levels can become dangerous as humidity rises. Livestock can enter the critical zone at 90 °F if the relative humidity is high enough. We can't do much to change the humidity, but we can avoid other problems that may have an additive effect.

Lack of shade can also make a big difference in heat stress. As ruminants, it is normal for cattle to ingest large quantities of forage and then rest and digest. The heat of fermentation produced in the rumen must be eliminated and a shady place to rest is important. As an experiment, place a thermometer in a shady place and another nearby but just outside the shade on a hot day and note the dramatic difference. Remember that any time the ambient temperature exceeds body temperature the cattle cannot dissipate heat and their body temperature rises.

An adequate supply of clean drinking water helps maintain a safe body temperature. When cattle are allowed to stand, defecate, and urinate in water sources the palatability of the water can decline until the animals choose to limit their intake. Research has shown that when animals are

fenced out and vegetation is allowed to grow to the water's edge, the water stays cooler as well as cleaner.

The endotoxins associated with tall fescue can cause a rise in body temperature of several degrees. This can make the difference between safe and critical conditions when other factors are marginal. Cattle on fescue pastures can often be seen to seek refuge in ponds or shade when cattle grazing adjoining non-fescue pastures are still actively grazing.

Perhaps the greatest heat stress danger, for man and beast, is activity level. Weaning calves that are walking and bawling are at much greater risk. When environmental factors approach the danger zone avoid working and processing animals if possible. If that is not possible plan activity for early in the morning before the day's heat buildup begins and after the previous day's heat buildup is dissipated. Do not process cattle in the evening. Even though air temperatures may go down it takes several hours for body temperatures to return to normal after the day's heat accumulation in the tissues.

Every summer cattle are lost to heat stress. A little planning and common sense can go a long way towards minimizing these losses. A good rule of thumb is if it is too hot for you, it is too hot for your livestock.

Livestock Weather Hazard Guide

		Relative Humidity (%)																			
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Dry Bulb Temp. (F)	75									70	70	71	71	72	72	73	73	74	74	75	75
	76							70	70	70	71	72	72	72	73	74	74	74	75	76	76
	77						70	70	71	71	72	72	73	73	74	74	75	75	76	76	77
	78					70	70	71	71	72	72	73	74	74	75	75	76	76	77	78	78
	79				70	70	71	72	72	73	73	74	74	75	75	76	77	77	78	78	79
	80			70	70	71	72	72	73	73	74	74	75	76	76	77	78	78	79	79	80
	81		70	70	71	71	72	73	73	74	75	75	76	77	77	78	78	79	80	80	81
	82		70	71	71	72	73	73	74	75	75	76	77	77	78	79	79	80	81	81	82
	83	70	71	71	72	73	73	74	75	75	76	77	78	78	79	80	80	81	82	82	83
	84	70	71	72	72	73	74	75	75	76	77	78	78	79	80	80	81	82	83	83	84
	85	71	72	72	73	74	75	75	76	77	78	78	79	80	81	81	82	83	84	84	85
	86	71	72	73	74	74	75	76	77	78	78	79	80	81	81	82	83	84	84	85	86
	87	72	73	73	74	75	76	77	77	78	79	80	81	81	82	83	84	85	85	86	87
	88	72	73	74	75	76	76	77	78	79	80	81	81	82	83	84	85	85	86	87	88
	89	73	74	74	75	76	77	78	79	80	80	81	82	83	84	85	86	86	87	88	89
	90	73	74	75	76	77	78	79	79	80	81	82	83	84	85	86	87	87	88	89	90
	91	74	75	76	76	77	78	79	80	81	82	83	84	85	86	86	87	88	89	90	91
92	74	75	76	77	78	79	80	81	82	83	84	84	85	86	87	88	89	90			
93	75	76	77	78	79	80	80	81	82	83	84	85	87	87	88	89	90				
94	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90					
95	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90						
96	76	77	78	79	80	81	82	84	84	86	87	88	89	90	91						
97	77	78	79	80	81	82	83	84	85	86	87	88	90	91							
98	77	78	79	80	82	83	84	85	86	87	88	89	90								
99	78	79	80	81	82	83	84	86	87	88	88	90									
100	78	79	80	82	83	84	85	86	87	88	90	91									
105	80	82	83	84	86	87	89	90	91												

Alert
Danger
Emergency

Can We Select Cattle to Reduce Pinkeye Incidence??

By Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Pinkeye has long been a costly nuisance to cattle producers. Eye infections sometimes lead to partial or complete blindness in one or both eyes. Reduced beef production in the form of lowered weight gain, milk production, body condition, and eventually even poorer reproduction can result from eye infections and lesions. One of the culprits that initiates and spreads eye problems between herds and among herdsmates is “Pinkeye” or more properly called Infectious

Bovine Keratoconjunctivitis. An excellent Oklahoma State University fact sheet about the prevention and treatment of “Pinkeye” is available online at:
<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2689/VTMD-9128web.pdf>.

Iowa State University animal scientists analyzed field data from ISU herds and cooperator herds in 2003 through 2005. They sought to estimate the genetic measurements that could aid in the selection of cattle resistant to Infectious Bovine Keratoconjunctivitis (IBK), commonly known as pinkeye. They found a decrease in weaning weight of 30 pounds per calf infected with pinkeye. The analysis of the field data revealed an estimate of 0.11 for heritability of resistance to pinkeye. **This estimate is considered to be of low heritability, which indicates that only slow progress can be made based on selection for IBK resistance.** It does mean that, over time, if we select replacements from cows that are not prone to having eye problems (especially pinkeye) we would be able to very gradually reduce the incidence of pinkeye in our herds.

Also they studied the immune components involved in eye disease defense mechanisms. Tear samples were collected from the eyes of 90 calves in 2004 in order to quantify immunoglobulins (commonly called antibodies). The result of this analysis indicated that as the amount of Immunoglobulin A in the tears increases, the likelihood of infection and/or the severity of infection decreased. **This information would suggest that properly fed, properly immunized cattle, with a strong immune system will be more resistant to pinkeye.** Source: [Rodriguez and co-workers. Iowa State University Animal Industry Report 2006.](#)

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