High Prices to Continue For the Beef Industry

July 2001 Chris Hurt

Summary

Strong cattle prices with declining beef supplies are expected in the coming 12 months as the size of the cow herd drops. The beef cow inventory continued to decline according to the latest USDA inventory count published in the *Cattle* report. Beef cow numbers dropped by .3 percent which continues the decrease began in 1995. Since that time, beef cow numbers have decreased by six percent. There does not appear to be any turn toward expansion in the near term as heifer retention for both the beef and the milk herds continue to decline.

The lack of supply response by the nation's cattle producers seems to be related to drought conditions which still are making feed supplies in Texas, Oklahoma, and much of the mountain and western states very uncertain, and continued uncertainty regarding beef demand given sharp declines in Europe and media attention given to foot and mouth disease and mad cow disease.

By this time next year, it is likely that some movement toward expansion will be taking place. This will increase the number of heifers being retained to go back into herds, and also reduce the rate of cow slaughter, which remained high with drought and harsh weather this past winter.

Over the next 12 months, beef supplies are expected to drop one to two percent, with fed cattle prices increasing to an average in the $75 to $80 range. Feeder cattle and calves will be in tight supply, with prices remaining strong, although not as high as the past due to higher prices of corn, soybean meal, and sorghum. Still steer calf prices this fall are expected to be in the low high $90 to low $100 per hundredweight, and feeder steer prices in the mid to higher $80s on the Plains, and a few dollars lower in the corn belt.

Domestic beef demand appears to be stable this year, after surging in 1999 and 2000. However, beef trade is proving to be a drag to cattle prices as exports are down due to weakness of Asian currencies, and imports are higher due to currencies values and high U.S. cattle prices.

The Numbers

Data from the July cattle inventory report are shown in Table 1. All cattle and calves stood at 105.8 million head a decline of .5 percent from last year's July inventory. The number of beef cows dropped slightly to 33.85 million head, a modest decline of .3 percent. Milk cow numbers were down more sharply with a 1.1 percent reduction.

The number of beef heifers being retained for replacements in cow herds was down 2.1 percent. This reflects the continued attitude among beef producers that the high value of calves is more tempting than the potential returns from building their cow herds. Dairy replacement heifers were also down 2.7 percent which will result in further decreases in the dairy herd.

The first estimate of the 2001 calf crop is for a .6 percent reduction. Many had felt that the calf crop would be smaller due to harsh winter weather in the first few months of the year. However, this does not seem to be the case as the calving percentage (calf crop divided by the number of cows at the start of the year) remained fairly constant in comparison to previous years.

While smaller calf supplies and dropping cow numbers point to a smaller number of animals in the distant future, the cattle inventory for this fall and spring market supplies was not as limited. The number of heifers over 500 pounds that were headed for market were up .1 percent and the number of steers over 500 pounds were up sharply at 2.1 percent. This will provide a larger pool for steer and heifer slaughter in the second half of 2001. Calves under 500 pounds were down 1.7 percent, and likely means that the slaughter of steers and heifers will be several percent below year previous levels in the first-half of 2002.

Supplies

Several factors are critical to the evaluation of what beef supplies will be in the coming year. The first of these is marketing weights. Carcass weights had been marching higher until about mid December of 2000. Cold weather and escalating grain prices slowed gains and resulted in lower marketing weights. Surprisingly, even after grain prices abated and weather moderated into the spring and summer, weights

Beef Production

Year	Qtr.	Beef Prod. Mill. #'s	% Change Year-Ago
1999	I	6,397	2.9%
	II	6,627	2.6%
	III	6,838	3.0%
	IV	6,522	2.9%
	Year	26,384	2.8%
2000	I	6,653	4.0%
	II	6,697	1.1%
	III	6,914	1.1%
	IV	6,511	-0.2%
	Year	26,775	1.5%
2001	I	6,182	-7.1%
	II	6,510	-2.8%
	III	6,685	-3.3%
	IV	6,314	-3.0%
	Year	25,691	-4.0%
2002	I	6,225	0.7%
	II	6,497	-0.2%

Finished Steer Prices

Year	Qtr.	Neb.Steers $/Cwt.	% Change Year-Ago
1999	I	$62.43	1.1%
	II	$65.04	1.5%
	III	$65.12	10.4%
	IV	$69.65	14.1%
	Year	$65.56	6.7%
2000	I	$69.32	11.0%
	II	$71.59	10.1%
	III	$65.43	0.5%
	IV	$69.65	0.0%
	Year	$69.00	5.2%
2001	I	$79.11	14.1%
	II	$75.30	5.2%
	III	$73.35	12.1%
	IV	$77.93	11.9%
	Year	$76.42	10.8%
2002	I	$78.22	-1.1%
	II	$77.98	3.6%

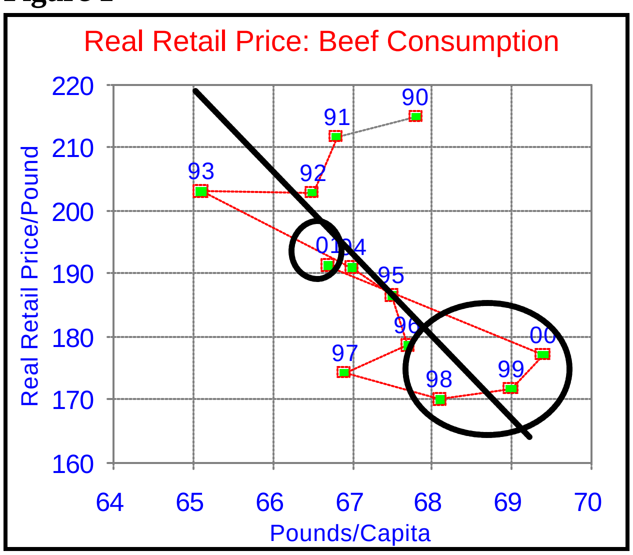
have remained low. This was likely related to the very strong finished cattle prices in the late winter and spring as feedlot managers chose to get cattle to market with high prices rather than keep them in the feedlot for a few added weeks and risk a collapse in prices. Weights have stayed one to two percent lower than the same period last year for most of the spring and summer, and I have assumed that weights will remain down for the rest of the summer and fall. In the first-quarter of 2002, however, weights will likely be back above the weather induced levels of 2001. Feedlot managers need to keep weights in check, as they are a direct impact on supplies. Carcass weights by quarter are shown in Table 4.

The second big uncertainty is the level of cow slaughter. Surprisingly, cow slaughter remained quite high during the first-half of this year being up by nearly six percent. Beef and milk producers were not only sending their young heifers to the feedlots, they aggressively moved cows toward market also. Difficult winter weather and impacts of the 2000 drought in some areas made feed supplies tight and high priced thus contributing to the increased cow slaughter.

I continue to believe that managers of beef cow operations will shift there attitude toward expansion sometime in the year ahead. If so, this will result in a reduction in the portion of cows headed to market, and thus reduce cow slaughter. However this reduction may not begin until pastures improve next spring and summer.

Given these assumptions, beef supplies are expected to be down two to three percent in the last half of this year and roughly unchanged in the first half of next year. During the 12 months from mid 2001 to mid 2002, beef supplies are expected to be down, on average, 1.5 percent.

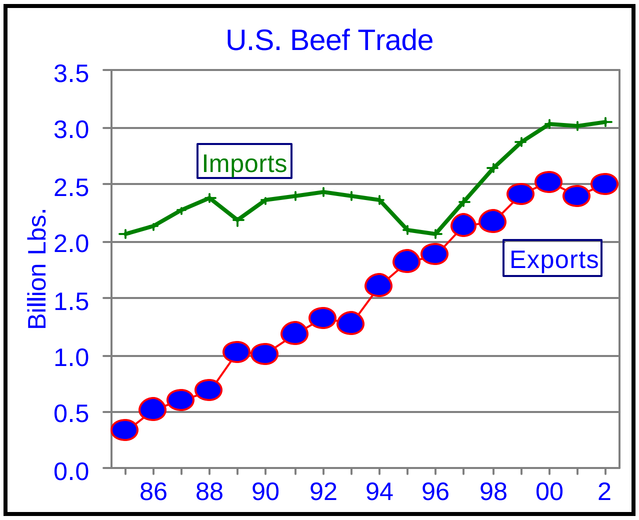
Figure 1



Domestic and Foreign Demand

Demand for beef remains favorable. A shift to improved beef demand seems to have started in 1998. In 1999 and 2000, finished cattle prices increased with an increase in per capita production, generally a sign of increasing demand. This is shown graphically in **Figure 1** as the increase in inflation adjusted retail beef prices with increasing per capita supplies in 1999 and 2000, (see the larger circled area on the graph). In the year 2001, supplies are expected to be around 67 pounds per person, with inflation adjusted retail prices up sharply (smaller circle on **Figure 1**). So far, it is not so convincing that beef demand is continuing to increase, but it seems to be stable for 2001. Consumer concerns and media attention given to mad cow disease in Europe and foot and mouth disease on several continents seems to have had little impact on domestic beef demand, however, some reductions in exports may be attributable to reductions in

Figure 2



beef demand in Asia due to these concerns, although these are difficult to document.

Beef trade is expected to weaken this year as USDA is projecting exports to decline by about five percent from last year, while imports remain constant, **Figure 2**. Most of this decline has already occurred due to high value of the dollar in our primary Asian markets. Exports in the last-half of 2001 are expected to be near those of the last-half of 2000.

Beef imports will reach a record high level in 2001 when measured as a percentage of U.S. production, and will stand at nearly 12 percent of our total production. Large imports are the result high cattle prices in the U.S. and weak foreign currencies. The primary source of increased beef imports in the first five months of 2001 has been Australia which increased by 31 percent compared to the same time period in 2000.

Live animal imports are up as well by 18 percent in the first five months of 2001. Live imports from Canada are up 25 percent and up 13 percent from Mexico.

Prices Should Remain Strong

Recovery in finished cattle prices can be expected at the end of the summer and especially this fall. Summer fed cattle prices for 1100 to 1300 Nebraska choice steers are expected to average in the $72 to $75 range. Prices are expected to increase in the fall to the $76 to $80 range. First quarter 2002 prices are expected to be modestly higher than in late 2001. Late winter and early spring highs are expected to be similar to last year when they reached daily highs in the lower $80s. Over the 12 months from mid-2001 to mid 2002, Nebraska fed steers are expected to average near $77, a $4.50 increase over the past 12 months (see Table 5).

Strong prices are also anticipated for calves and feeder cattle, although maybe not quiet as strong as in the past 12 months. Prices for 500 to 550 pound calves at Oklahoma City are expected to average in the low $100s per hundredweight this fall. This is about $3 higher than the fall of 2000. For the first-half of 2002, prices are expected to average near $103 per hundredweight, however, this would be $4 lower than the near record high prices in the first-half of 2001.

Feeder cattle prices will likely follow a pattern similar to calves, and that is strong, but not as high as during the past year. This fall, 750 to 800 pound Oklahoma City feeder cattle are expected to average in the high $80s which is about the same as last fall. However, prices could edge somewhat lower into the winter and spring and are expected to be in the mid $80s, somewhat more than one dollar below the prices in early 2001. Lower prices are associated with the anticipation that feed prices will be higher next winter and spring compared with year previous prices. I generally say that prices in the eastern corn belt are $3 to $5 lower than at Oklahoma City.

Implications for the Cattle Industry

Continued strong cattle prices appear to be the best bet for the cattle industry in the coming year as supplies remain moderate and domestic demand remains stable to upbeat. The slow growth in the domestic economy could pose a threat if it were to drop into a recession, However, at this time the consensus call is for about a two percent real growth this year and maybe two and one-half to three percent next year.

Feedlot managers have paid tremendous amounts for calves currently in feedlots. This makes them vulnerable to any type of set-back in finished cattle prices, and may increase the need to keep some inventories hedged with futures or long put option positions.

With continuation of drought in Texas and most of the mountain and western states, calves will be moved to feed lots quickly this year. Shortage of feed supplies in this vast region will encourage a continued large supply of cows moving to slaughter and assure that the January 2002 cow herd will continue to drop. However, some retention of cows could begin by mid-year 2002 if pasture and range conditions improve.

In the central plains and corn belt, forages will be much more available than in the west and southwest, although corn, soybean meal, and sorghum prices will be higher than in the past 12 month period. This may provide an opportunity to move cattle out of feed short areas at depressed prices to those of more abundant supplies.

With no signs of an expansion in cow numbers apparent at this time, we can assume that low beef supplies and favorable cattle prices are here for several more years. Very high calf prices could then be expected in 2002 and 2003, with prices fading in the middle of the decade.

Table 1. Cattle Number, 1991 - 2001

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	% Change vs. 2000
All cattle and calves												
January 1	98,896	99,559	99,176	100,988	102,755	103,487	101,656	99,744	99,115	98,198	97,309	-0.9
July 1	109,000	109,200	109,000	111,300	113,000	111,500	109,200	107,700	107,000	106,300	105,800	-0.5
Beef cows												
January 1	33,271	33,775	33,365	34,650	35,156	35,228	34,458	33,885	33,745	33,569	33,400	-0.5
July 1	34,400	34,550	34,900	35,600	36,100	35,600	34,800	34,400	34,150	33,950	33,850	-0.3
Milk cows												
January 1	10,156	9,913	9,658	9,528	9,487	9,416	9,318	9,199	9,133	9,190	9,203	0.1
July 1	10,000	9,850	9,700	9,500	9,500	9,400	9,300	9,200	9,150	9,250	9,150	-1.1
Heifers 500 lbs. +												
Beef replacement												
January 1	5,605	5,761	6,092	6,365	6,475	6,179	6,042	5,764	5,535	5,503	5,588	1.5
July 1	5,300	5,700	5,700	5,900	5,700	5,500	5,300	5,000	4,800	4,700	4,600	-2.1
Milk replacement												
January 1	4,220	4,202	4,176	4,144	4,141	4,104	4,058	3,986	4,069	4,000	4,047	1.2
July 1	4,200	4,200	4,000	4,000	3,900	3,700	3,600	3,600	3,700	3,700	3,600	-2.7
Other heifers 500 lbs. +												
January 1	8,357	8,142	8,550	9,068	9,275	9,949	10,212	10,051	10,170	10,147	10,140	-0.1
July 1	7,400	7,100	7,300	7,500	8,000	8,100	8,200	8,100	8,100	8,100	8,200	1.2
Steers 500 lbs. +												
January 1	16,369	16,755	16,940	17,042	17,463	17,732	17,392	17,189	16,891	16,682	16,438	-1.5
July 1	15,100	15,100	14,900	15,200	15,400	15,100	14,800	14,600	14,400	14,300	14,600	2.1
Bulls 500 lbs. +												
January 1	2,228	2,279	2,278	2,307	2,390	2,392	2,350	2,270	2,281	2,293	2,272	-0.9
July 1	2,200	2,200	2,200	2,300	2,400	2,400	2,300	2,200	2,200	2,100	2,100	0.0
All Calves < 500 lbs.												
January 1	18,691	18,733	18,117	17,884	18,369	18,488	17,826	17,401	17,290	16,815	16,221	-3.5
July 1	30,400	30,500	30,300	31,300	32,000	31,700	30,900	30,600	30,500	30,200	29,700	-1.7
Calf Crop	39,026	39,290	39,448	40,059	40,211	39,776	38,961	38,812	38,796	38,621	38,400	-0.6

Table 2: Ratios of Commercial Slaughter Steers and Heifers to Beginning Cattle Inventories, 1985 to 2001

	July 1 Inventory Steers and Heifers 500+[b]	Second Half Steer and Heifer Slaughter	Ratio	Calves < 500 Pounds July 1	First Half Steer and Heifer	Ratio
	thousand head			thousand head		
1985	24,200	14,056	58.1	33,600	14,219	42.3
1986	23,300	14,394	61.8	32,200	14,046	43.6
1987	22,400	14,304	63.9	31,100	13,989	45.0
1988	21,800	14,101	64.7	31,000	13,564	43.8
1989	21,600	13,470	62.4	30,600	13,425	43.9
1990	21,600	12,901	59.7	30,300	13,048	43.1
1991	22,500	13,397	59.5	30,400	13,137	43.2
1992	22,200	13,231	59.6	30,500	13,101	43.0
1993	22,200	13,472	60.7	30,300	13,576	44.8
1994	22,700	14,038	61.8	31,300	14,119	45.1
1995	23,400	14,554	62.2	32,000	14,742	46.1
1996	23,200	13,831	59.6	31,700	14,680	46.3
1997	23,000	14,861	64.6	30,900	14,446	46.8
1998	22,700	14,447	63.6	30,600	14,794	48.3
1999	22,500	15,001	66.7	30,500	15,159	49.7
2000	22,400	14,942	66.7	30,200	14,347	47.5
2001[a]	22,800	14,911	65.4	29,700	14,108	47.5

[a] Projected for next 12 months

[b] Excluding replacement heifers

Table 3 Cow Inventory, July 1 and Cow and Bull Slaughter for the Following Year

	Cow Inventory	Cow Slaughter	Ratio Slaughter /Inventory	Bull Slaughter	Ratio Bull Slaughter to Cow Slaughter
	-----thousand head-----			thousand head	
1985	46,182	7,765	16.8	738	9.5
1986	45,000	7,319	16.3	710	9.7
1987	44,400	6,398	14.4	665	10.4
1988	44,300	6,400	14.4	650	10.2
1989	43,900	5,982	13.6	666	11.1
1990	44,000	5,720	13.0	634	11.1
1991	44,400	5,659	12.7	621	11.0
1992	44,400	5,964	13.4	656	11.0
1993	44,600	6,008	13.5	662	11.0
1994	45,100	6,052	13.4	661	10.9
1995	45,600	6,545	14.4	689	10.5
1996	45,000	7,007	15.6	715	10.2
1997	44,100	6,351	14.4	666	10.5
1998	43,600	5,846	13.4	615	10.5
1999	43,300	5,643	13.0	648	11.5
2000	43,200	5,680	13.1	618	10.9
2001[a]	43,000	5,375	12.5	589	11.0

[a] Projected for next 12 months

Table 4. Commercial Beef Slaughter, Production, and Dressed Weights, 1983-2002

Year	Slaughter (1,000 hd)	Weight (lb)	Production (lbs)	Slaughter (1,000 hd)	Weight (lb)	Production (lbs)
	January-March			**April-June**		
1983	8,735	632	5,525	8,844	627	5,549
1984	9,169	623	5,708	9,341	623	5,819
1985	8,936	637	5,691	9,023	656	5,917
1986	8,884	649	5,769	9,574	652	6,247
1987	8,765	657	5,756	8,878	646	5,737
1988	8,575	664	5,696	8,759	660	5,784
1989	8,180	676	5,529	8,694	664	5,777
1990	8,117	678	5,507	8,541	671	5,733
1991	7,858	685	5,383	8,299	686	5,694
1992	8,032	697	5,597	8,255	693	5,726
1993	7,910	677	5,357	8,469	672	5,690
1994	8,162	704	5,745	8,615	702	6,042
1995	8,418	699	5,888	9,053	699	6,325
1996	8,971	703	6,303	9,589	693	6,642
1997	8,912	686	6,112	9,307	690	6,419
1998	8,681	716	6,215	8,995	718	6,461
1999	8,733	733	6,397	9,176	722	6,627
2000	9,005	739	6,653	9,195	734	6,750
2001	8,593	719	6,182	8,904	731	6,510
2002[a]	8,516	731	6,225	8,901	730	6,497
	July-September			**October-December**		
1983	9,547	630	6,012	9,537	626	5,974
1984	9,559	622	5,949	9,503	624	5,933
1985	9,352	659	6,166	8,978	643	5,774
1986	9,654	650	6,275	9,180	645	5,925
1987	9,222	657	6,063	8,783	666	5,852
1988	9,199	672	6,186	8,538	674	5,575
1989	8,612	684	5,892	8,430	686	5,785
1990	8,449	689	5,814	8,112	687	5,564
1991	8,453	711	6,012	8,074	707	5,710
1992	8,451	709	5,991	8,122	696	5,654
1993	8,673	700	6,076	8,268	704	5,819
1994	8,825	723	6,377	8,629	709	6,114
1995	9,279	714	6,625	8,890	706	6,277
1996	9,123	700	6,390	8,900	684	6,084
1997	9,300	710	6,603	8,879	704	6,258
1998	9,071	732	6,638	8,737	726	6,339
1999	9,337	733	6,841	8,915	732	6,525
2000	9,257	747	6,914	8,791	741	6,511
2001[a]	9,009	742	6,685	8,602	734	6,314

[a] Projected for next 12 months

Table 5. Beef, Pork, Poultry Production, Nebraska Steer Prices, and Oklahoma City Feeders by Quarter

		Beef Production	Pork Production	Poultry Production	Nebraska Choice Steer Price	Oklahoma City 5-550 Steers	Oklahoma City 750-800 Steers
			million pounds			$/cwt.	
1991	I	5,383	3,901	5,821	80.89	109.37	91.16
	II	5,694	3,792	6,311	79.34	112.00	93.42
	III	6,012	3,821	6,415	70.29	101.91	87.66
	IV	5,710	4,434	6,338	70.60	94.76	81.88
1992	I	5,595	4,321	6,314	75.95	95.72	79.56
	II	5,723	4,033	6,624	77.18	93.44	80.71
	III	5,990	4,264	6,816	72.84	94.16	83.50
	IV	5,660	4,567	6,644	76.49	91.17	81.72
1993	I	5,357	4,204	6,542	80.65	99.51	85.76
	II	5,690	4,151	6,987	79.78	104.17	86.80
	III	6,076	4,140	7,027	73.77	100.08	87.99
	IV	5,819	4,535	6,970	71.23	94.83	85.27
1994	I	5,745	4,182	6,765	73.10	98.96	82.14
	II	6,042	4,240	7,238	68.79	94.16	77.63
	III	6,377	4,326	7,504	66.37	86.42	76.37
	IV	6,114	4,913	7,339	67.63	84.58	74.74
1995	I	5,888	4,488	7,343	71.51	86.81	72.62
	II	6,325	4,394	7,653	64.73	78.62	65.77
	III	6,625	4,240	7,472	62.65	68.29	65.44
	IV	6,277	4,690	7,683	66.10	64.45	67.55
1996	I	6,303	4,389	7,880	63.06	62.12	58.11
	II	6,642	4,104	7,949	60.26	59.83	56.79
	III	6,390	4,143	8,043	67.35	64.90	63.29
	IV	6,084	4,449	7,930	70.39	67.49	66.15
1997	I	6,107	4,194	7,875	66.40	81.28	69.44
	II	6,416	4,091	8,341	66.63	90.28	75.88
	III	6,603	4,194	8,275	65.65	92.65	80.44
	IV	6,258	4,767	8,259	66.56	89.90	78.98
1998	I	6,215	4,687	8,135	61.73	83.44	75.49
	II	6,461	4,429	8,316	64.11	86.71	74.00
	III	6,638	4,625	8,244	58.97	74.41	67.89
	IV	6,339	5,239	8,452	61.06	79.21	69.80
1999	I	6,397	4,865	8,501	62.43	87.35	71.93
	II	6,627	4,630	8,928	65.04	89.12	72.17
	III	6,838	4,672	8,848	65.12	87.12	77.57
	IV	6,522	5,110	8,760	69.65	93.20	83.87
2000	I	6,653	4,824	8,886	69.32	106.13	84.91
	II	6,699	4,478	9,250	71.63	101.64	84.76
	III	6,914	4,606	9,050	65.43	101.80	86.25
	IV	6,511	5,010	9,100	69.65	97.97	88.76
2001*	I	6,182	4,805	9,050	79.11	107.78	86.82
	II[P]	6,510	4,550	9,275	75.30	107.04	89.56
	III	6,685	4,685	9,125	73.35	102.41	87.34
	IV	6,314	5,000	9,100	77.93	101.62	88.47
2002	I	6,225	4,925	9,050	78.22	102.98	85.12
	II	6,497	4,675	9,450	77.98	103.15	85.32

[P] Preliminary

*Prices are point estimates, but users should look at a range of possible prices at least in a band that both adds and subtracts the following $/cwt. These are the estimation errors:
Nebraska steers: $2.00/cwt.; 500 to 550 # steers: $2.50/cwt.; 750 to 800 # steers: $3.00/cwt.
This range has included about 67% of the prices from the historical price estimates.