What is the cattle cycle? Very simply stated, it is a response of producers to prices. It is the old story of supply and demand.

When supply exceeds demand, prices are low and there is no incentive to produce, so cattlemen tend to liauidate their herds. As herds are liquidated, beef becomes less plentiful in the marketplace; demand eventually exceeds supply, so prices respond by going up; cattlemen have an incentive to produce, to expand. And as herds expand, there comes a time when supply once again exceeds demand. Prices go down. The whole thing starts over.

Complicate this with a delayed reaction due to bovine biology. If a producer with expansion on his mind decides to save a heifer calf for breeding purposes, the effect of his decision will not be felt until she presents him with a calf

And that, very simply, is the cattle cycle, Historically, it has taken about 10 years from start to finish.

The cattle herd inventory is simply an estimate of herd numbers gathered and published by USDA. When compared to previous years' inventories, it tells cattlemen where they are in the cycle.

## **CATTLE HERD INVENTORY:** Where the Cows Are

by Ann Gooding

JAN. 1 CATTLE INVENTORY-1978, 1979, 1980 (000 Head)\*

	1978	Change, 1978 to 1979		1979	Change, 1979 to 1980		1980
		Number	Percent		Number	Percent	
Total Cattle	116,375	-5,511	-4.74	110,864	+ 97	+0.09	110,961
Cows Having Calves	49,748	-1,905	-3.83	47,843	- 49	-0.10	47,794
Beef Cows	38,809	-1,806	-4.65	37,003	- 20	-0.05	36,983
Dairy Cows	10,939	- 100	-0.91	10,839	- 29	-0.27	10,810
Heifers Over 500 Lb.	17,710	- 825	-4.66	16,885	+341	+2.02	17,226
Beef Replacements	5,845	- 328	-5.61	5,517	+414	+7.50	5,931
Dairy Replacements	3,896	+ 40	+1.03	3,936	+230	+5.84	4,166
Other	7,970	- 537	-6.74	7,433	-301	-4.05	7,130
Steers Over 500 Lb.	16,779	- 458	-2.73	16,321	-413	-2.53	15,908
Bulls Over 500 Lb.	2,544	- 143	-5.62	2,401	+ 89	+3.71	2,490
Calves Under 500 Lb.	29,595	-2,182	-7.37	27,413	+ 130	+0.47	27,543
Calf Crop	43,839	-1.087	-2.48	42,752			
Value Per Head	\$232		10-3371 20-17	\$403			\$502

<sup>\*</sup>Based on USDA figures.

The inventory is virtually unchanged from a year ago as is the number of beef cows. Beef replacement heifers, however, are up nearly 8%. This may not signify expansion, but the numbers do indicate the end of herd liquidation.

he recently released USDA Jan. 1 cow herd inventory held a few surprises. Although a fairly large gain had been predicted (1-3 million, depending on whose numbers you used), the number remained nearly stationary, up only insignificantly from the one published in January 1979. Even though this indicated the expansion phase was not yet in full swing, it did mark the first time since 1975 that the inventory hadn't declined from the previous year.

Topper Thorpe, manager of Cattle-Fax, market analysis service affiliated with National Cattlemen's Assn., explains that "Typically the cycle does not move out of one phase immediately into another." There is usually a year or two when

numbers remain fairly static, when producers spin their wheels, then decide to expand. So, he adds, the recent numbers make this look more like a typical transition from the reduction to the expansion phase than had earlier been predicted.

Why were initial estimates over-stated? First, Thorpe says, there was a significant adjustment in the estimated 1979 calf crop (that estimate appeared in the July 1, 1979, report). It turned out to be high by about 1%. On top of that, Thorpe says there was a larger than normal residual figure (accounting for death loss, number adjustments, etc.). A combination of the two explains most of the experts' over-estimation of the January 1980 number.

No Logical Explanation

The 1980 numbers also defied predictions in the individual states, Thorpe says. Even though one had been anticipated, the inventory report did not suggest a regional pattern. Expansion, which was expected to occur consistently throughout the west, chose random states in that region; it visited some states in the midwest and southeast quite unexpectedly. And for this, Thorpe says, there just doesn't appear to be a logical explanation.

Thorpe does see the inventory increasing in the next year, basing his prediction on both the 8% replacement heifer increase as well as slightly lighter slaughter this year than last. He adds, too, that the profit incentive will still be there for the cow-calf producer, since prices should remain reasonably good.

Expansion in 1979, Thorpe believes, was curtailed somewhat by interest rates that climbed after mid-year. And price fluctuations in calves, first more than \$1 and then well below that mark, probably made some people think twice about expansion. Cattle numbers do respond to price pressures.

And the general economic situation, with inflation boosting everyone's cost of production, has had some effects on expansion decisions. So although the pause between liquidation and expansion is natural, according to Thorpe, this time it is happening for some different reasons.

Special Influences

Thorpe believes the industry will be subjected to some special influences in the next few years. Inflation rates and tight money are two obvious ones. Then there is caution in the southeast, which in the '70s was one of the largest areas of expansion. Southeasterners, taking a harder look at their alternatives, may curtail expected expansion throughout the next cycle.

As the industry faces expansion and its ultimate partner, lower prices, Thorpe has some advice.

"I think the greatest help for stabilizing the fluctuation in the cattle cycle would be for each individual in the industry to take a real cold-blooded business approach to producing beef." Instead of waiting until over-production makes the industry unprofitable, he says, "Cowmen should be monitoring their profit margins all along, protecting them a couple years down the road."

Does he think cattlemen will do this? "We couldn't afford not to do that in the past and we didn't do it, so maybe we aren't going to do it this time either," he says, but increasing costs and changes in the business may force the cattleman's hand this time around. "We have never faced the inflationary pressures we are facing now and will continue to face. We have never

faced an energy situation like the one we are facing now." These things, he cautions, are going to affect our costs of production. Can We Afford It?

The problem is not our ability to produce but whether we can afford to produce, Thorpe maintains. For example, he says, "If the industry could profitably absorb 110-lb. per capita consumption five years ago, it can't do that now simply because of increased cost of production-unless the industry becomes more efficient in that production

"Beef in the retail market is competing with relatively cheap pork and poultry," he says, adding that is partly due to heavy production in those two industries but partly due to increased efficiency. "We can't afford to sit back on our laurels and say that beef is the desired meat product. We have really got to get tracking—not only to withstand the cost squeeze but to also be able to compete in the supermarket.

"As we go into the expansion phase, people are going to have to devote a significantly greater proportion of their time to the business side of beef-to planning, to marketing, to managing. The push to become efficient is going to cause people to employ more extensive and more sophisticated marketing and management approaches. Some people will continue to have some good luck. But I think luck in the future is going to be luck made by good management."