Ag Decision Maker

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Seasonal Cattle Price Patterns

Cattle prices, influenced by changes in cattle slaughter, supplies of other meat and poultry products, demands for cattle for feeding or grazing, and consumer demands for beef, vary over the course of a year. If these changes are repeated from year to year, there may be seasonal patterns of price changes that are somewhat consistent and predictable.

Seasonal price patterns may change some over time if there are changes in production technology, industry structure, or other factors that affect production or demand patterns. The price indexes in this report are based on the period from 1999 through 2008.

Seasonal price patterns

Two kinds of information are reflected in the seasonal price indexes presented here.

Price index

The first is an average price index for each month. This index shows the average relationship of prices in a particular month to the average for the year.

Variability range

The second type of information presented is a variability range that provides an indication of the reliability of the price index for a particular month. It is based on the variability of prices for a specified month during the years included in the index calculation. Specifically, points on the charts that are above or below a particular monthly index indicate the range where the index for that month could be expected to fall 68 percent of the time. The 68 percent range statistically represents the average plus or minus one standard deviation.

Use January of Figure 1 for example. The monthly index value is 99 and the range is 88 - 110, so the price in a particular year will likely fall in this range approximately 2/3 of the time. The smaller the variability factor (the closer the points are to the index value), the more reliable is the monthly index.

Patterns by type of cattle

The material below presents information on seasonal price patterns for various classes and types of cattle, as well as an indication of the reliability of these patterns from year to year. Different classes of cattle have somewhat different seasonal patterns of marketing and prices.

The figures in this report reflect the average monthly indexes, with the variability range indicated by points above and below the index values. Actual monthly index numbers and the variability factors are shown in Table 1.

Choice steers (1100-1300 lbs.)

On average during the 1999-2008 period, prices trended up seasonally from January to April, then declined into the summer months before increasing again in the fall as shown by Figure 1. Prices were lowest in July and highest in November. Prices were below the annual average June to August and near the annual average in January, February, May, September and October and were above the average March, April, November and December.

Yearling steers (700-800 Ibs.)

On average, yearling steers show great seasonal variation during the 1999-2008 period as shown in Figure 2. Prices were relatively flat January to March, then trended upward through September before moving lower. Prices were highest in early fall and lowest in winter. Prices were below the annual average January through May; and above the average in June through December.

Steer calves (500-600 Ibs.)

During the 1999-2008 period, prices have relatively little differences in the average price index, but large

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variation in any given year (Figure 3). Steer calf prices were highest in March through July and lowest in October.

Cull cows

Cull cow prices vary greatly on average during the 1999-2008 period as shown in Figure 4. Prices trended upward from January to May and are stable from May to July and decline again from August to November. Cull cow prices were highest in the summer and lowest November and December. Prices were below the annual average in the first three and last three months of the year. They were above the annual average April - September.

Forecasting cattle prices

The seasonal price index may also be used to forecast prices for the months ahead based on the historic relationship. To forecast a future month, divide the current month average price by the index for the current month and multiply this number by the index for the future month. For example, if May fed cattle prices average $95 per cwt., the forecast for August would be 95 / 1.01 x .99 = $96.91/cwt. Adjusting for the variability suggests that there is a 68 percent probability that the August monthly average price will fall between $85 and $109.

Probability of price changes

The actual pattern of short term price movements over time is another potentially useful guide to seasonal price changes. *Information File* **Cattle Price Changes By Two-Week Periods** summarizes information on average price changes of choice slaughter steers by two-week periods throughout the year. The number of years that prices increased and decreased provides an indication of the probability of particular short term price movements. The average percentage increase or decrease gives some idea of the possible magnitude of price changes. For example, the data indicates there is a fairly high probability that prices will increase from the first half of March to the last half of the month. But there's a low probability that prices will rise from the last half of April to the first half of May.

This information can be useful in making short term marketing decisions on cattle. It can help with decisions on whether to market a bit lighter than normal or to carry cattle an additional week or so before marketing.

Figure 1. Choice Steers, Interior Iowa & S. Minn 1999-2008

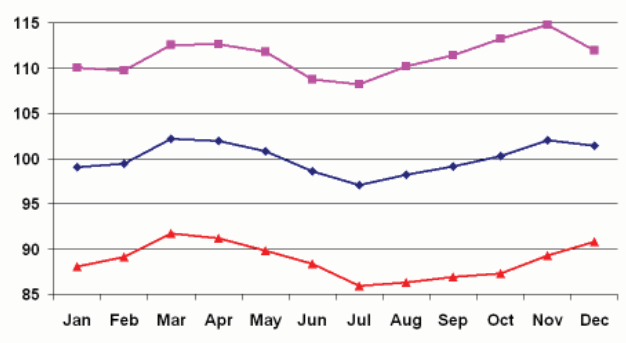

Figure 2. Med. Frame, 700-800 lb. steers, Ok. City 1999-2008

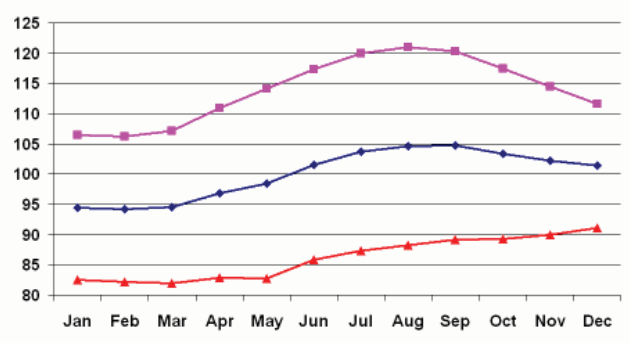

Figure 3. Med. Frame, 500-600 lb. steers, Ok. City 1999-2008

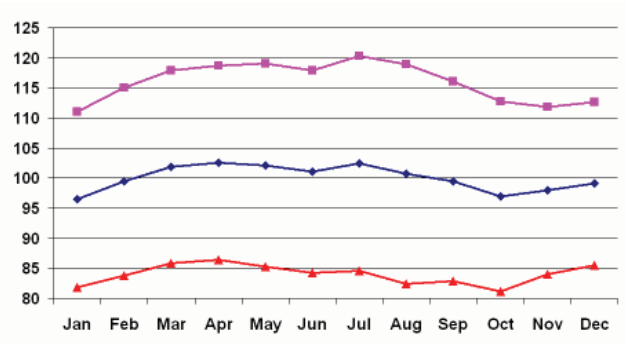

Figure 4. Boning Utility Cows, Sioux Falls 1999-2008

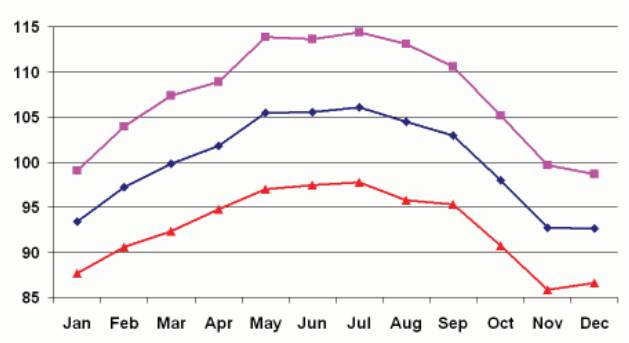

Table 1-Price index variability by type of cattle 1999-2008

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Choice steers (IA-So. MN)												
Price index	99	99	102	102	101	99	97	98	99	100	102	101
Variability	11.0	10.3	10.4	10.7	11.0	10.2	11.1	11.9	12.3	13.0	12.7	10.6
700-800 lb. steers												
Price index	94	94	95	97	98	102	104	105	105	103	102	101
Variability	12.0	12.0	12.6	14.0	15.7	15.8	16.3	16.4	15.6	14.1	12.3	10.2
500-600 lb. steers												
Price index	96	99	102	103	102	101	102	101	99	97	98	99
Variability	14.6	15.6	16.1	16.1	16.9	16.8	17.9	18.3	16.6	15.8	13.9	13.6
Utility Cows												
Price index	93	97	100	102	105	106	106	104	103	98	93	93
Variabilty	5.7	6.7	7.5	7.0	8.4	8.1	8.3	8.7	7.6	7.2	6.9	6.0

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