

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

Economics Commentator

Economics

4-11-1995

Seasonal Cattle and Hog Prices: Sioux Falls, S.D. 1980-1994; Hog and Cattle Comments


Dillion M. Feuz

South Dakota State University

Gene Murra

South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/econ_comm

 Part of the [Agricultural and Resource Economics Commons](#), and the [Regional Economics Commons](#)

Recommended Citation

Feuz, Dillion M. and Murra, Gene, "Seasonal Cattle and Hog Prices: Sioux Falls, S.D. 1980-1994; Hog and Cattle Comments" (1995). *Economics Commentator*. Paper 317.

http://openprairie.sdstate.edu/econ_comm/317

This Newsletter is brought to you for free and open access by the Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Economics Commentator by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

ECONOMICS COMMENTATOR



South Dakota State University

No. 348 April 11, 1995



SEASONAL CATTLE AND HOG PRICES: SIOUX FALLS, S.D. 1980-1994

*Dillon M. Feuz
Associate Professor*

Prices of many agricultural commodities tend to consistently move higher or lower in some months of the year, creating a somewhat reliable and predictable seasonal pattern. These seasonal price patterns are caused primarily by seasonal differences in production (supply), and to a lesser extent by seasonal changes in demand. Producers have little, if any, control over seasonal demand, but they may be able to alter production schedules and thus alter their own seasonal supply. Environmental and biological factors may limit how quickly and to what extent producers can alter supply, but over time as new technologies and management practices are adopted changes will occur.

The intent of this article is to examine seasonal price patterns of cattle and hogs at Sioux Falls, South Dakota over the last 15 years. Possible explanations for changing seasonal patterns are provided and likely price patterns of the future are mentioned. By gaining an understanding of present and possible future seasonal price patterns, producers may be able to adjust their production and marketing plans and increase the relative profitability of their cattle and hog enterprises.

Monthly Price Indexes

Frequently, in looking at monthly prices, prices are expressed as a percentage of the annual average price. By dividing each month's average
(Continued on p.2)



HOG AND CATTLE COMMENTS

*Gene Murra
Extension Livestock
Marketing Specialist*

Hog Comments

The March 1 Hog and Pig report was released on March 31. It contained few surprises. It did not provide enough positive news to boost prices back to where they were in early to mid-March. It also did not provide large downward price pressure.

The U.S. inventory of 58.4 million head on March 1 is a record high—two percent above the previous record high March inventory set in 1994. All of the increase was in the market hog category. There, inventories were three percent above year-earlier levels. The heavier weight category (180 lbs and over) had an inventory four percent above March 1, 1994. Other weight categories were two or three percent above last year.

The market inventory increases should keep pressure on prices this Spring and early Summer. More pork, along with more beef and poultry, will give the consumer plenty of meat choices. Cash hog prices likely will stay in the \$30-40 range. The above \$40 area is reachable, but so is the below \$30 area. Producers should watch for forward pricing opportunities. There is downside price risk.
(Continued on p.5)

*Please turn to page 6 for Dick Shane's
report on 1995 Planting Intentions.*

(Seasonal ... cont'd from p.1)

price by the annual average price and multiplying by 100, a set of monthly index values is created. In this manner, monthly prices from a year with relatively high prices can be compared with monthly prices from a year with relatively low prices.

However, these monthly index numbers may be biased if there are sustained cycles or upward or downward trends over time in the annual average prices. To overcome this possibility, monthly price indexes can be calculated for each price series using a 12 month moving average technique. That procedure was used for this analysis.

A monthly index number of 100 implies that the price for that month is typically equal to the annual average price. An index number of less than 100 implies that prices are typically lower in that month, than the average annual price. For example, an index number of 95 for a given month means that the price in that month is typically 5 percent below the average annual price.

The monthly seasonal price indexes for slaughter cows, slaughter steers, feeder steers, sows, market hogs, and feeder pigs are displayed in Figures 1-6.

Slaughter Cows

Utility grade slaughter cow prices have a pronounced seasonal price variation (Figure 1). For the last five years prices have tended to rise rather sharply in the first quarter of the year, then level off somewhat and reach a peak price in May. The peak price generally is 2 to 4 percent above the annual average price. Prices also have been seasonally higher in August and September. The traditionally heavy marketings of cull cows in the fourth quarter put downward pressure on prices with the November price often is 5 to 6 percent below the annual average. Lower quality canner and cutter grade cows have a slightly more pronounced seasonal pattern than utility grade cows depicted in Figure 1.

The seasonal pattern for slaughter cows has tended to be less pronounced in recent years compared to the 1980-84 time period. However, the overall seasonal pattern has been fairly stable the last ten years, and likely will continue into the near future.

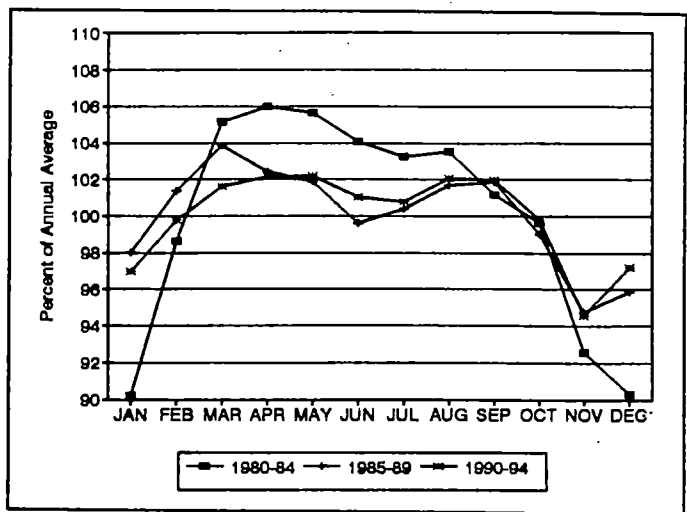


Figure 1. Monthly Seasonal Index for Utility Grade Slaughter Cows, Sioux Falls, South Dakota.

Slaughter Steers

Slaughter steer prices generally rise through the first quarter and early part of the second quarter, reaching a peak in April or May (Figure 2). The pricing pattern the last five years has been for prices to peak in April and then decline rather sharply in May and June. September has had the lowest average slaughter steer price. July and August also have been quite low.

This is a change from the seasonal pattern of the early 1980's. In the 1980-84 and 1985-89 periods, the price peak occurred in May and the price decline was not as sharp, particularly for the 1980-84 period. This change in price patterns may be attributed to more calves being fed on an accelerated ration directly to a slaughter weight and fewer being fed a more traditional backgrounding ration before being placed on a finishing ration. Given the trend towards heavier weaned calves with greater propensity to gain, the more recent seasonal pattern likely will continue. If it changes, however, the change likely will be for prices to peak in March rather than in April.

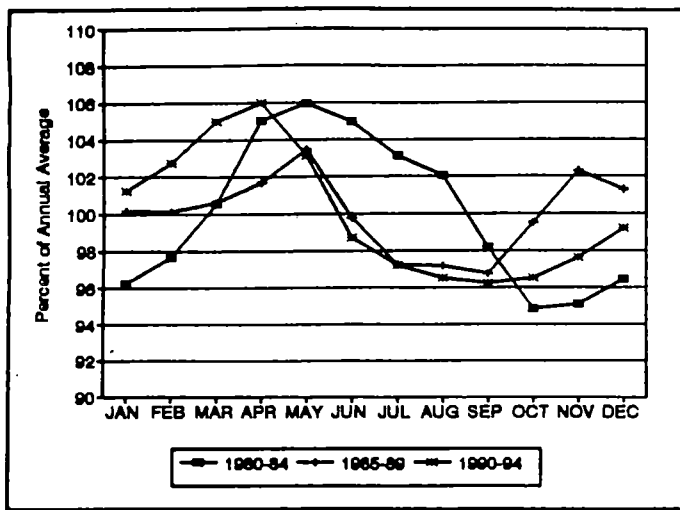


Figure 2. Monthly Seasonal Index for Slaughter Steers, Sioux Falls, South Dakota.

Feeder Steers

Feeder cattle prices are affected by seasonal supply. For example, supply of lighter weight feeders typically increases in the fall when many calves are weaned. Feeder cattle prices also are affected by seasonal demand. For example, there may be strong demand for lighter weight feeders for "grass cattle" or for wheat pastures. The Sioux Falls market probably is more affected by demand for feeder cattle to enter into feedlots. Prices are not reported for every month for lighter weight feeder cattle at Sioux Falls, so it is difficult to evaluate their seasonal patterns.

Prices for 700-800 pound feeder steers and 600-700 pound and 700-800 pound feeder heifers all have fairly similar seasonal patterns. The 700-800 pound steer price is at a seasonal high from August through October, 700-800 pound heifer prices are at a seasonal high from July through September, and 600-700 pound heifer prices are at a seasonal high in July and August. All these classes of feeder cattle could be expected to reach a slaughter weight in the February through April time frame, the seasonal high for slaughter cattle.

The 700-800 pound feeder steer seasonal price pattern is presented in Figure 3. The seasonal pattern has changed over time, particularly in the first four months of the year. These feeder cattle prices probably reflect cattle feeders expectations for slaughter cattle prices in the summer, which

also should have changed over time (Figure 2). Improvements in cattle genetics, and the ability of cattle to make rapid weight gains in the feedlot, also may have influenced this seasonal pattern.

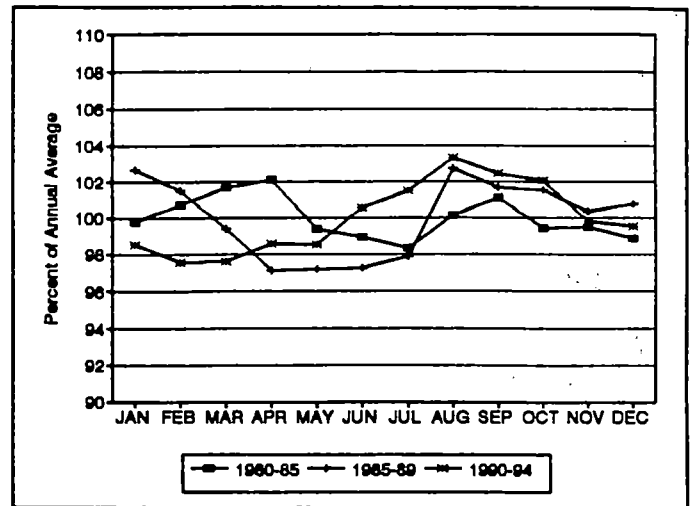


Figure 3. Monthly Seasonal Index for 700-800 Pound Feeder Steers, Sioux Falls, South Dakota.

Sows

The seasonal price pattern for sows has changed considerably over the last 15 years (Figure 4). For the early 1980's, prices were near the annual average for March through July, then were seasonally higher in August and September and seasonally lower in November and December. During the late 1980's, prices were seasonally low from January through April and then prices increased and remained seasonally high from May through October. Prices then declined sharply so that the lowest monthly prices were in November and December.

The pattern for the 1990's has been for prices to rise sharply through the first part of the year and to peak in May. Prices have declined to near the annual average for the summer months, and then fallen rapidly to seasonal lows in November and December. The changing structure of the hog industry may be affecting this seasonal pattern.

Market Hogs

The seasonal price pattern for market hogs has been much more stable than that for sows. However, there have been some subtle changes that could affect optimal production and

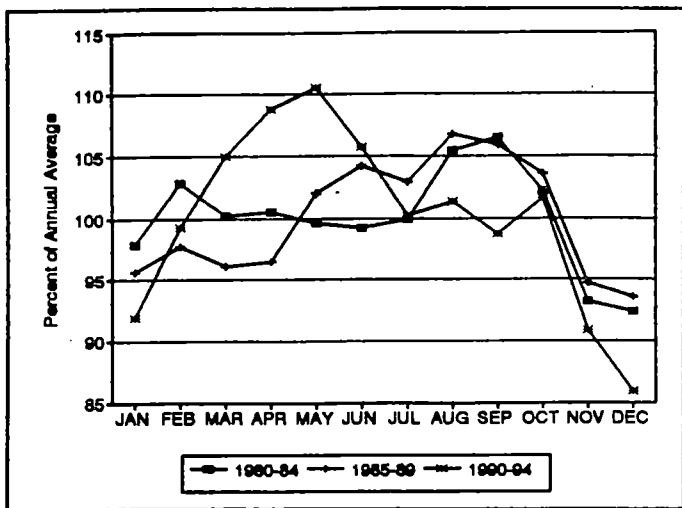


Figure 4. Monthly Seasonal Index for 400 pound Sows, Sioux Falls, South Dakota.

marketing strategies (Figure 5). The peak price the last five years has been in June compared to July for the late 1980's and August for the early 1980's. Also, the spring seasonal low during March and April for the 1980's has been much less pronounced during the 1990's. However, prices have been relatively lower in November and December the last five years. It also would appear that in general market hog prices are becoming less seasonal. This is probably a result of more hog confinement facilities farrowing, and hence marketing, on a year-round basis. This trend towards less seasonality will most likely continue.

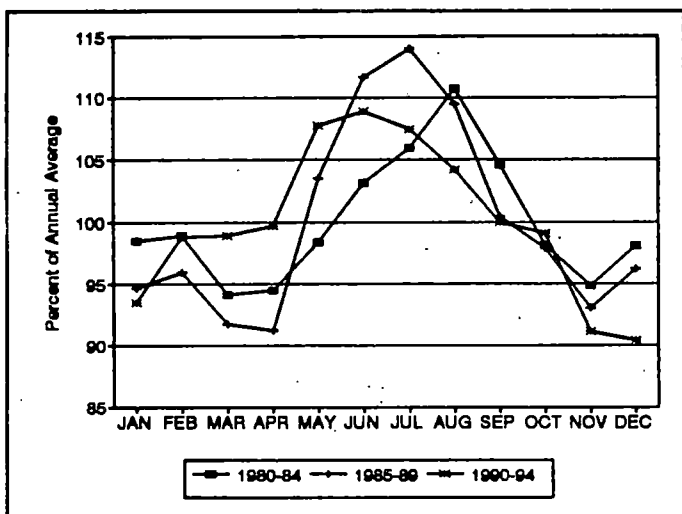


Figure 5. Monthly Seasonal Index for Market Hogs, Sioux Falls, South Dakota.

Feeder Pigs

The seasonal price pattern for feeder pigs has remained quite consistent and very pronounced over the 15 year time period (Figure 6). Prices generally rise through the first quarter of the year and reach seasonal highs in March and April. Prices then decline into the summer and remain seasonally low for the remainder of the year. It would appear that during the 1990's the seasonal pattern has become even more pronounced. This trend would seem to be in contradiction with the trend for less seasonal prices for market hogs.

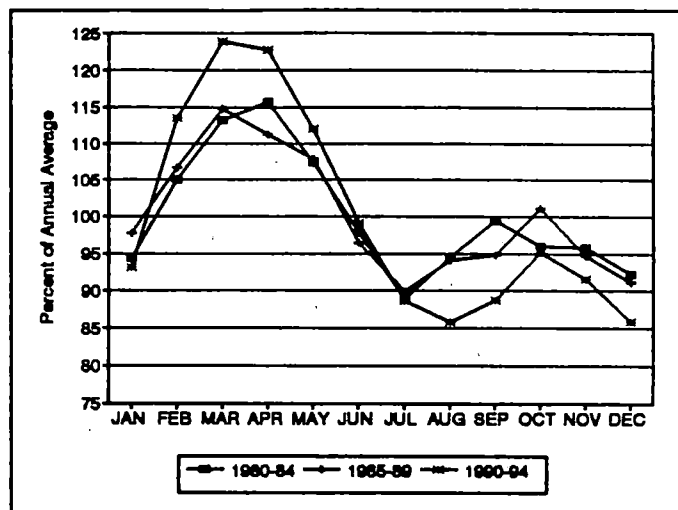


Figure 6. Monthly Seasonal Index for Feeder Pigs, 40-50 pounds, Sioux Falls, South Dakota.

Conclusion

Seasonal price variations can be important in many production and marketing decisions. This article has shown that many of these seasonal relationships change over time. As they do change, managers may need to re-evaluate some of their production and marketing plans.

(Readers interested in a more complete analysis of historical cattle prices should request from the author a copy of "Research Report 95-2".)

(Hog & Cattle ... Cont'd from p. 1)

The breeding herd on March 1 was estimated to be three percent below the 1994 level. Before one gets too excited about that, there are a couple of cautions to keep in mind. First, a three percent reduction in sow numbers may not be enough to cause a reduction in the pig crop. In the Dec-Feb time period, producers with inventories of less than 100 head saved an average of only 7.0 pigs per litter. Those with inventories over 2000 head saved 8.7 pigs per litter. When one considers that growth is occurring in the larger operations, those which save more pigs per litter and have more litters per sow, it is easy to conclude that the 1995 pig crop could be greater than the 1994 pig crop.

Also, there appears to be less inclination to liquidate and an indication that large-scale production continues to expand. Farrowing intentions can and do change. The expansion mood of the "big guys" still seems to be there. Some facilities already are on line. Others are in the building process and soon will be producing pigs. One operation in Iowa is rumored to be shooting for 4000 head per day. In North Carolina, total inventory was up 26 percent--breeding inventory was up 19 percent. A 25 percent increase in total inventory in Missouri (breeding inventory was up only two percent) points toward some of the rapid growth of "big guys" in hog production.

The U.S. pork industry seems to be heading into a period when cash prices generally will be between \$30-40. As was true in the short run, prices could move above \$40. The \$50 area seems almost unreachable. Prices could slip below \$30, maybe more often than above \$40. That means producers must be as efficient as possible and utilize marketing skills merely to earn relatively small profits. Not a pretty picture -- but one which can be expected barring major changes.

Cattle Comments

The cattle market is a tough one to figure. In March, cash prices for fed cattle dropped \$5-6. Live cattle futures dropped \$6 (Spring and Summer months) to \$2 (Fall months). The past

two Cattle on Feed reports have included large placements of cattle into feedlots. The packing industry was able to pass lower retail prices back to the producer. The entire picture was one of pessimism.

Then, for no real reason, the market recovered. In the first week in April, futures were \$1.00-3.00 higher. The cash market also responded, with \$2.00-4.00 gains for the same period.

What will happen to prices the rest of the year? That's a tough question. The most likely scenario is for prices to settle in the \$60's. This Spring and early Summer, prices could be closer to \$70. The lower \$60's (maybe even a visit into the upper \$50's) is more likely for this Fall. Plenty of beef, pork and poultry should combine to put a lid on prices. And, if fed cattle prices are low, feeder cattle prices will be pressured. The \$80 area for feeders this Fall may be close to what we will see.

The longer term (1996-1997) is not much brighter. More cows, the Jan 1 inventory keeps moving up, means more calves to be fed out. The pork industry probably won't back off. And, neither will the poultry industry. In fact, the beef industry should expect more competition from pork in the next several years.

The longer term result likely will be a price level below what has been experienced in recent years. Prices above \$70 for fed steers are possible, but don't expect that as the "rule". Prices near \$80 are most unlikely. On the lower end, prices below \$60 are possible. Much there depends on when (or if) liquidation occurs and how much beef that adds to the system.

Efficiency will be required to stay in business (unless cattle are only a hobby, as it is to some). Quality will be required. Expect large discounts, especially for feeder cattle, if they are not the "right kind". And, effective use of marketing tools, including futures and options, may be required at times. The next few years are expected to be "tough ones" for cattle producers.



SOUTH DAKOTA STATE UNIVERSITY
 Economics Department
 Box 504A
 Brookings, SD 57007

Address Correction Requested

Non-Profit Org.
 U. S. Postage
PAID
 Brookings, S. D.
 Permit 24



**1995 Planting Intentions:
 Impact on Crop Prices**

*Richard Shane
 Extension Grain
 Marketing Specialist*

Farmers' planting intentions for 1995 were released by USDA at the end of March (see Table). US corn acreage was around 0.7 million acres lower than expected, and soybean acreage was about 1.1 million acres more than expected. This suggests that soybeans are more competitively priced for flex acres than corn with no deficiency. Corn acreage may also be shifted to soybeans because of increased fertilizer costs. Those acreages, combined with normal or trend yields and slightly lower export demand, could result in national average prices 10-15¢/bu. higher than in 1994 for both crops. Harvest time prices in SD with this scenario would average around \$5.00/bu. for soybeans and just under \$2.00/bu. for corn. Of course, both crops will depend heavily on growing season weather.

US spring wheat acreage was 400,000 acres less than expected, and winter wheat acreage was reduced 600,000 acres compared to its January planting report, but durum acreage was 300,000 acres more than expected. With trend yield of around 39 bu./acre for all wheat and slightly reduced demand due to better crops in Australia and China, US wheat price would average \$3.10 to \$3.30/bu. SD harvest time price would dip to under \$3.00/bu. at the seasonal mid-summer lows.

US sunflower acreage will decrease slightly and SD acreage will increase slightly compared to last year, if intentions are carried out. Rotational concerns of many farmers have kept SD acreage rather steady even

after very good yields and profits in 1994. Price for sunflowers will continue to be responsive to the world edible oil market which promises to remain strong. Harvest time prices in SD will most likely be around 8.7 to 9.2¢/lb. with a normal crop. Confectionery sunflowerseed acreage continues to grow in response to strong demand and profitable price levels.

Oats and barley acreages continue to decline. Corn and wheat continue to be more competitive under current government program provisions and price outlook scenarios.

Weather markets could develop during or after planting. Be ready to take advantage of such price increases using forward pricing techniques.

U.S. Planting Intentions (million acres) - 1995

	United States		South Dakota	
	'94 Actual	'95 Intended	'94 Actual	'95 Intended
Corn	79.16	75.32	3.80	3.70
Soybean	61.94	61.45	2.45	2.50
Sprg Wh	18.32	18.39	2.10	2.20
Winter Wh	49.25	49.25	1.55	1.60
Durum	2.85	3.29	.03	.05
Barley	7.16	7.04	.34	.26
Oats	6.64	6.75	.75	.65
Sunflower	3.57	3.51	.94	.96
Sorghum	9.77	9.21	.28	.35
Flax	.18	.19	.02	.02

ECONOMICS COMMENTATOR

EDITOR: Donald C. Taylor

ECONOMICS DEPARTMENT

South Dakota State University
 Box 504A
 Brookings, SD 57007-0895
 Phone: (605) 688-4141
 Fax: (605) 688-6386

400 copies of this newsletter were produced at a cost of less than \$100

