

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

---

Economics Commentator

Department of Economics

---

5-15-1992

## The South Dakota Cattle Feeding Industry; Wheat Market Possibilities

Dillion M. Feuz

*South Dakota State University*

Xiaohong Yu

*South Dakota State University*

Donald C. Taylor

*South Dakota State University*

Richard Shane

*South Dakota State University, richard.shane@sdstate.edu*

Follow this and additional works at: [http://openprairie.sdstate.edu/econ\\_comm](http://openprairie.sdstate.edu/econ_comm)



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

---

### Recommended Citation

Feuz, Dillion M.; Yu, Xiaohong; Taylor, Donald C.; and Shane, Richard, "The South Dakota Cattle Feeding Industry; Wheat Market Possibilities" (1992). *Economics Commentator*. Paper 277.

[http://openprairie.sdstate.edu/econ\\_comm/277](http://openprairie.sdstate.edu/econ_comm/277)

This Newsletter is brought to you for free and open access by the Department of 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](mailto:michael.biondo@sdstate.edu).

## The South Dakota Cattle Feeding Industry



Dillon M. Feuz  
Asst. Prof., Economics  
Xiaohong Yu  
Research Associate  
Donald C. Taylor  
Professor, Economics

The intent of this Economics Commentator article is to report some initial findings of a survey of 500 South Dakota cattle feeders. The survey, which was conducted in November, 1991, contacted all cattle feeders feeding over 500 head per year and the remaining surveys were drawn from a random sample of the smaller cattle feeders.

Of 211 producers who returned the surveys, 101 responded that they fed cattle to slaughter weights. Three of these surveys were not usable, so the results presented are based on the responses of 98 cattle feeders.

### Overall Farm Operation

Approximately 75% of the cattle feeders receive a majority of their income from the sale of livestock. However, not all of the livestock income is from slaughter cattle. Over 75% of the cattle feeders have other livestock enterprises on their operations. The most common other enterprises are: stocker cattle, 31% of the feeders; feeder calves, 25% of the feeders; and slaughter hogs, 20% of the feeders.

### Cattle Management and Feed Practices

Half of the cattle feeders raised (on their own place) at least 50% of the calves they placed on feed, while 33% of the feeders raised all of the calves they placed on feed. Most of the cattle are placed on feed during the 4<sup>th</sup> quarter or 1<sup>st</sup> quarter of the year. Only 14% of the feeders place an equal number of cattle on feed throughout the year.

(Continued on page 2)

## Wheat Market Possibilities



by

Richard Shane  
Extension Grain  
Marketing Specialist

The first official winter wheat production estimate released by USDA on May 11, 1992 was within 10 million bushels of industry expectations. USDA estimates winter wheat production of 1.618 billion bushels from 43.3 million harvested acres with an average yield of 37.3 bushels per acre. The harvested acreage is almost 10 percent higher than last year and the yield is 2.5 bushels per acre higher than in 1991. The large increase in harvested acres is definitely possible due to government program changes from 1991 and graze our reductions. The yield may be too high as crop conditions have deteriorated since the May 1, 1992 effective date for this estimate. Crop conditions are virtually the same as last year on May 11, 1991. Consequently, a yield of around 35 bushels per acre seems more appropriate at this time. With this lower yield, winter wheat production would be reduced by 100 million bushels to 1.518 billion bushels.

USDA projected spring wheat and durum production at 650 million bushels based on trend yield and prospective plantings of 19.8 million acres (19 million harvested). Current soil moisture conditions in the Northern Plains do not support such high yields.

The supply and demand potential for wheat in 1992/93 is presented in Table 1. Total wheat production forecast by USDA as of May 1, 1992 is 2.268 billion bushels.

It is likely that production will be lowered to 2.12 billion bushels due to less than ideal weather conditions. This amount of production will keep supply (Continued on page 3)

Eighty percent of the cattle feeders stated that cattle are fed in a drylot for the entire feeding period. The most common targeted average daily gain was between 2.0 and 2.5 pounds for backgrounding and between 2.5 and 3.0 pounds for finishing steers. Approximately 23% feed their heavy finishing steers (950+ lbs.) to gain more than 3.0 pounds per day. Steers are typically fed to a slaughter weight of 1200 - 1300 pounds and heifers slaughter weights are generally in the 1100 - 1200 pound weight range.

Much of the feed used is raised by the cattle feeders rather than purchased. This is particularly true of the high moisture grain and roughages. Table 1 contains the percentages of various feeds that are raised by the cattle feeders.

TABLE 1. PERCENTAGE OF FEED RAISED RATHER THAN PURCHASED.

Percentage of Feed Raised	Percentage of Cattle Feeders			
	Dry Grain	High Moisture Grain	Hay	Corn Silage
0-49%	28%	9%	16%	6%
50-99%	36%	25%	19%	4%
100%	36%	66%	64%	90%

The feeding rations generally include a greater proportion of grain to total dry matter as the weight of the slaughter steer increases (Table 2). This is consistent with the targeted average daily gains previously reported.

Only six cattle feeders reported they feed some organically produced grains or forages to their finishing cattle.

Physical Facilities and Operator Characteristics

The size of the feedlots in the survey ranged from having only 16 feet of feed bunk space to 10,000 feet of feed bunk space. The survey average was 1,445 feet. The percentage utilization of this bunk space was 89%, 78%, 66% and 82% for the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> quarter of the year respectively. However, half of the cattle feeders utilized 100% of their bunk space during the 1<sup>st</sup> and 4<sup>th</sup> quarter of the year.

TABLE 2. PERCENTAGE OF GRAIN TO TOTAL DRY MATTER IN THE RATION.

Percentage of Grain to Total Dry Matter	Percentage of Cattle Feeders		
	Backgrounded Steers (500-750 lbs)	Finishing Steers (750-950 lbs)	Finishing Steers (950+ lbs)
0 - 19%	16%	5%	1%
20 - 39%	32%	8%	7%
40 - 59%	41%	35%	14%
60 - 100%	11%	52%	78%

Most of the labor for the cattle finishing operations was provided by family members. Approximately half of the cattle feeders used only family laborers, and overall 81% of the labor for all of the feedlots was family labor. Ninety-six percent of the cattle feeders are married, and 35% of their spouses have off-farm employment. Just over 15% of the cattle feeders also have off-farm employment, and about 23% of them do custom work for neighboring farmers.

Most of the cattle feeders appear to be in fairly sound financial condition, as measured by their overall debt-to-asset ratio. However, 32% do have a debt-to-asset ratio of greater than 0.40. This is considered a sign of possible financial difficulty by most financial analysts.

The average age of the cattle feeders in the survey was 48. The age distribution of the cattle feeders is displayed in Figure 1.

More detailed analyses of the survey responses will be forth coming in future articles.

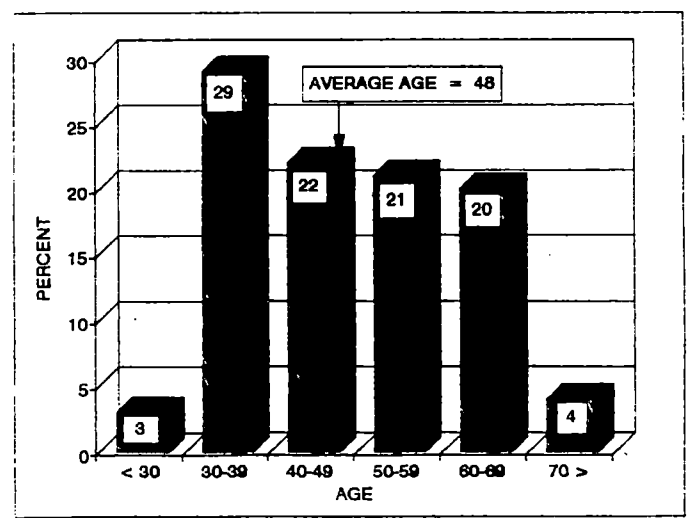


FIGURE 1. AGE DISTRIBUTION OF THE CATTLE FEEDERS.

\*\*\*\*\*

(Cont'd from p. 1 ... Shane)

tight and price will ration supply to the many demands for wheat.

Table 1. US Wheat Supply & Demand 1992/93

	USDA	SDSU*
Stocks	421	420
Production	2268	2120
Imports	40	40
Supply	2729	2580
Feed	175	175
Mill	810	810
Seed	95	95
Export	1200	1100
Demand	2280	2180
Stocks	449	400
US Ave. Price	3.15-3.55	3.20-3.60

\*More likely given May 15, 1992 conditions.

The biggest question on wheat demand is export potential. Current sales of new crop are sluggish and major competitors are increasing production. Exports of 1.2 billion bushels will be attained only if the U.S. government supports more aggressive EEP initiatives. This is certainly possible in an election year but for now 1.1 billion bushels seems more appropriate for an export projection.

Season average price for the U.S. will most likely average between 3.15 and 3.60 depending on growing season weather and export initiatives. If wheat crop conditions continue to decline and yields are forecast at less than 35 bushels per acre, look for prices to challenge \$4.00 in the new crop futures months. Stocks are tight and a good crop is needed to keep stocks from getting tighter. Weather developments promise to keep the wheat market very volatile. Whenever, the market offers prices in the upper end of the forecasted range, from \$3.30-\$3.60, forward price an amount you feel comfortable with for harvest time delivery. Currently, hedge and cash forward contract pricing opportunities have been in the \$3.30 to \$3.60 range over most of South Dakota. More pricing opportunities are likely to occur on weather scares. Be ready to price as these opportunities will not endure for very long. Write out your marketing plan and price objectives and get ready to act!

If you are not comfortable with pricing before harvest, consider storage alternatives. A run of good moist weather could push wheat futures lower before harvest. If this occurs, it may be a good time to buy call options to replace grain delivered at harvest.

If you have already priced a substantial portion of your expected wheat crop using a hedge or cash forward contract, you can buy call options to capture higher prices associated with weather rallies. This marketing strategy is known as a synthetic put. Be sure to compare call premium costs with your expected price advancement when considering this alternative.

Use of some of the above pricing alternatives may be desirable to help manage risk. The risk associated with wheat price for the year is exemplified in the figure on the next page. With a fairly normal yield of 34 to 36 bushels per acre, the nearby futures most likely will range from \$3.75 to \$3.50 to \$3.80. However, many other possibilities exist depending on world supply and demand conditions. If the U.S. has a bumper crop of over 37 or 38 bushels per acre, the prices along the dashed line are likely. But a short crop could push prices to \$5.00 before falling back to a more likely \$4.00 to \$4.25 range. Finally, a world wide bumper crop would limit U.S. exports and price could follow the lowest line on the figure to less than \$3.00 per bushel. Wheat would have to be priced low enough to be competitive in feed rations.

In summary, forecasting the exact harvest time wheat price is not possible. All one can do is attempt to price wheat in the upper range of most likely prices for the year.

\* \* \* \* \*

## ECONOMICS COMMENTATOR

EDITOR: Don Peterson, Agricultural Economist



ECONOMICS DEPARTMENT  
South Dakota State University  
Box 504A  
Brookings, SD 57007  
Phone: (605) 688 - 4141

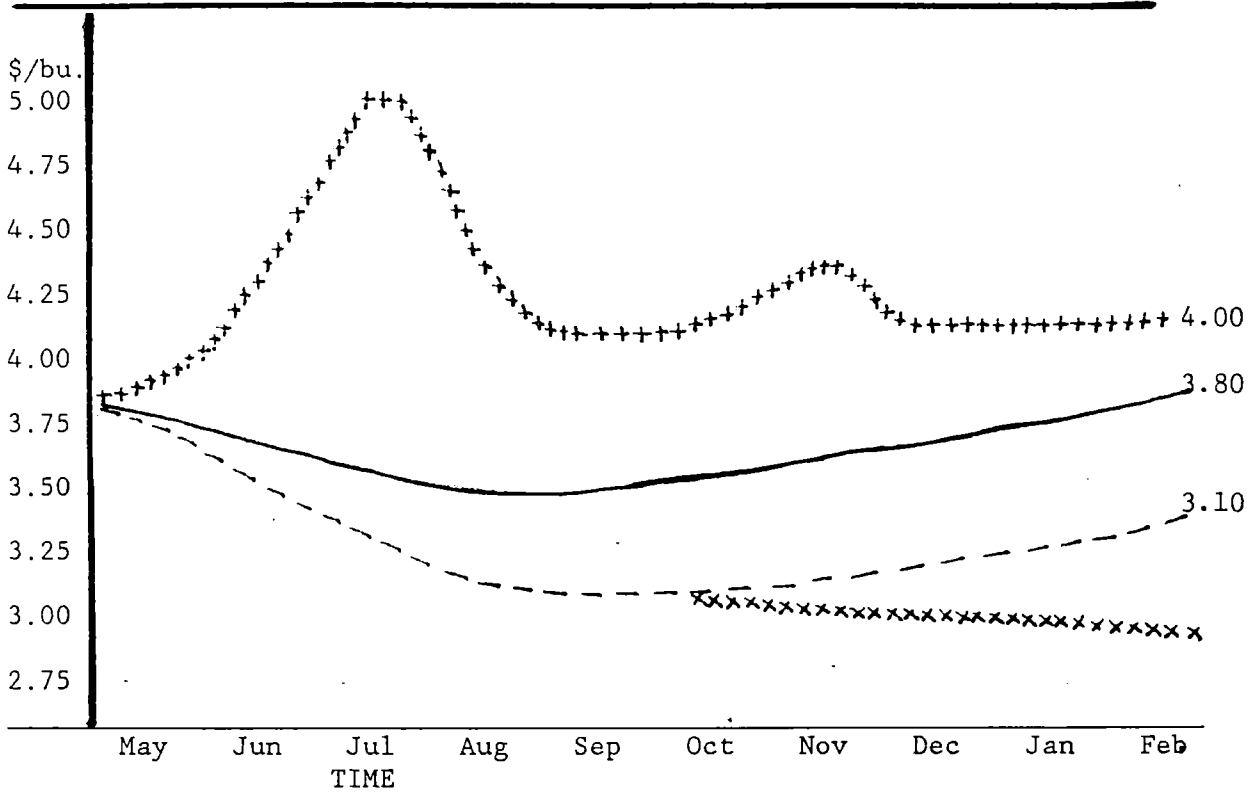
400 copies of this publication were produced at a cost of less than \$100.



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

Address Correction Requested

Figure: Minneapolis Wheat Nearby Futures Price, May 1992-Feb. 1993



— Most Likely Price  
 - - - Bumper Crop U.S.  
 +++++ Short Crop  
 xxxxxx Bumper Crop World