

December 3, 2001

## LATE SEASON CALF STRATEGIES

The feeder cattle market weakened significantly from earlier in the fall leaving many producers with less revenue than expected. Part of the weakness may be attributed to the market timing, as 550 pound steer calves placed now won't be expected to reach market weight until late June when prices are seasonally lower. However, most of the price decline is likely due to the weak beef complex. Many feedlots were losing money since before Labor Day. The weaker US economy and the discovery of BSE (Mad Cow disease) in Japan helped to push fed cattle prices lower. Feeder cattle prices are weaker than were expected earlier in the fall; many cow herds are considering alternative marketing strategies for calves.

Table 2 on the following page is a budget for backgounding or finishing steer calves. Currently, backgrounding the calves into April offers a greater return than finishing the calf for a late June market. Note that the budget assumes a lighter calf for backgrounding ( 500 v . 550 pounds). It also assumes a fairly aggressive feeding program, 2.2 ADG compared with 2.86 ADG in the feedlot. Expected selling price is the basis adjusted futures price at the close November 28 , and would be the expected hedge price.

Backgrounding pays $\$ 490 /$ head for the calf and returns the cow herd approximately $\$ 25 /$ head over all costs for a total return to the cow herd of $\$ 515$ net per calf. If the calf is backgrounded at home, there is another $\$ 20 /$ head paid for facilities and labor. Finishing the calf pays the cowherd $\$ 522 /$ head, but there is a loss of $\$ 19$ resulting in a net return of $\$ 503$. Facilities and labor earn approximately $\$ 49 /$ head if the calf is fed at home.

For either enterprise, the additional time should work to the producer's advantage as market prices are forecast to improve into the spring. While demand from a weak economy and reduced exports to Japan may take longer than a few months to recover, the current large supply of record weight cattle should be at a more manageable level by the second quarter.

## Hogs

Table 1 presents a summary of the monthly hogs and pigs report released November 30. October pig crop and farrowing estimates were both up from year ago levels, the first year to year increase since November 2000. The increase in farrowings was consistent with the intentions estimate in the September quarterly report. The November 1 breeding herd inventory is down $1.4 \%$ from one year ago. The number of sows bred during September was up $2.0 \%$. USDA began tracking monthly breeding herd inventory and sows bred data in October of 2000 so long term year to year comparison is not available. Reproductive productivity increases appear to have resumed with pigs per litter increasing $0.3 \%$ from October last year.

Table 1. Summary of the monthly hogs and pigs report released October 26.

|  | 2000 |  | 2001 |
| :--- | ---: | ---: | :---: |
| Change |  |  |  |
|  | $--(1000$ | head $)--$ | $(\%)$ |
| Sows farrowing during October | 940 | 953 | +1.4 |
| Pigs per litter | 8.85 | 8.88 | +0.3 |
| October pig crop | 8,319 | 8,465 | +1.7 |
| November 1 sow and gilt inventory | 6,055 | 5,968 | -1.4 |
| Sows \&gilts bred during October | 1,173 | 1,197 | +2.0 |

Table 2. Feeder Cattle Budget Worksheet
Prepared by Iowa State University Extension Economics
Date: November 28, 2001

|  | BackGround | Steer |
| :--- | ---: | ---: |
| Purchase Weight | $500 \#$ | $550 \#$ |
| Finished Weight | $775 \#$ | $1150 \#$ |
| Days on Feed | 125 | 210 |
| Projected Marketing Date | 04-May-00 | 28-Jul-00 |


| Costs (per head): |  |  |
| :--- | ---: | ---: |
| Feeder Price/cwt | $\$ 98.00$ | $\$ 95.00$ |
| Feeder Cost | $\mathbf{\$ 4 9 0 . 0 0}$ | $\mathbf{\$ 5 2 2 . 5 0}$ |

## Feed Costs

| Corn (Price and bushels) | $\$ 1.75$ | 26.5 | 63.0 |
| :--- | ---: | ---: | ---: |
| $\quad$ Corn Cost | $\$ 60.00$ | $\$ 46.38$ | $\$ 110.25$ |
| Hay (Price and tons) |  | 0.30 | 0.50 |
| Hay Cost | $\$ 0.15$ | 125 | $\$ 30.00$ |
| Supplement (Price and lbs.) |  | $\underline{\$ 18.75}$ | $\underline{\$ 27.15}$ |
| $\quad$ Supplement Cost | $\$ 83.13$ | $\$ 167.40$ |  |

Other Costs

| Vet medical \& operating costs |  | $\$ 10.00$ | $\$ 18.70$ |
| :--- | ---: | ---: | ---: |
| Interest - Feeder | $9.00 \%$ | $\$ 15.10$ | $\$ 27.06$ |
| $\quad \quad$ Feed/Operating | $9.00 \%$ | $\$ 1.44$ | $\$ 4.82$ |
| Labor Cost per hour | $\$ 10.00$ | $\$ 9.00$ | $\$ 30.00$ |
| Death Loss \% of purchase price |  | $1.50 \%$ | $1.50 \%$ |
| $\quad$ - Cost | $\$ 7.35$ | $\$ 7.84$ |  |
| Transportation/Marketing Cost | $\underline{6.50}$ | $\underline{\$ 8.80}$ |  |
| Total Other Costs | $\$ 49.39$ | $\$ 97.21$ |  |
| Total Variable Costs (per head) |  | $\mathbf{\$ 6 2 2 . 5 1}$ | $\mathbf{\$ 7 8 7 . 1 1}$ |
| Total Fixed Costs (per head) | $\mathbf{\$ 1 1 . 3 0}$ | $\mathbf{\$ 1 8 . 9 0}$ |  |


| Total Costs (per head) | $\mathbf{\$ 6 3 3 . 8 1}$ | $\mathbf{\$ 8 0 6 . 0 1}$ |
| :--- | ---: | ---: |
| Necessary Selling Price/cwt: |  |  |
| To Cover Variable Costs | $\$ 80.32$ | $\$ 68.44$ |
| To Cover Total Costs | $\$ 81.78$ | $\$ 70.09$ |
| Futures Price as of | $\$ 83.95$ | $\$ 69.00$ |
| Estimated Basis | $\underline{1.10}$ | $\underline{(\$ 0.58)}$ |
| Expected Price/cwt by Hedging |  | $\$ 85.05$ |
| Est. Return over Var. Costs/head | $\$ 68.42$ |  |
| Est. Return over Total Costs/head |  | $\mathbf{\$ 3 6 . 6 2}$ |
| $\mathbf{( \$ 0 . 2 8 )}$ |  |  |
|  |  |  |

John D. Lawrence

## CHINA AND U.S. GRAIN EXPORTS

Recent grain trade reports indicate China or its purchasers have cancelled 1.0 million tons ( 39.4 million bushels) of its corn export sales, and have purchased an additional 0.5 million tons of U.S. corn. These reports are sharpening the grain trade's focus on trade with that nation. China has been a large net exporter of corn in all but two years since the early 1980s, as shown in Figure 1. Additionally, as shown in Figure 2, its wheat imports have declined to very low levels in recent years. With China's forthcoming entry into the World Trade Organization on December 11, there is much optimism in the grain trade and USDA that China will abruptly reverse its long-standing position as one of the world's largest corn exporters and become a consistent net importer of corn. There also are widespread expectations that its wheat imports will increase substantially in the years ahead, thus tightening world feed wheat supplies.

The current trade reports present a confusing picture of what is actually occurring in China's corn trade position. One version indicated the Chinese export sales were cancelled by its foreign buyers. Another indicated China itself made the cancellations. If contracts would allow cancellation, it would be to the buyers' advantage to cancel since the sales were made in August, at prices $\$ 0.20$ to $\$ 0.30$ per bushel above late November levels. If China itself did the canceling, it would indicate domestic Chinese supplies are tighter than previously believed. The 0.5 million-ton purchase of U.S. corn appears to be an actual purchase and is positive for the corn market, even though the quantity is small.

If the grain industry's anticipated long-term shifts in China's grain trading position occur, they will be very positive for corn prices in the next several years. Reducing its exports by 220 to 250 million bushels per year and increasing its imports by 100 to 200 million bushels would potentially create up to 320 to 450 million bushels of new demand for U.S. corn, at the same time the domestic ethanol industry is expanding by 200 to 250 million bushels.

## A Perspective on Potential Chinese Corn Market Impacts

This year's estimated U.S. corn production is about 500 million bushels below expected total utilization. Assuming domestic U.S. corn feeding levels out after a steady long-term upward trend, 7.0 to 8.2 million more acres of corn than were planted in 2001 would be needed to meet this additional demand next year. That is figuring the additional acres would produce this year's U.S. average yield of 138 bushels per acre. Without increased U.S. acreage and/or yields, our usual forecasting models indicate Chicago corn futures prices would have the potential to move up to around $\$ 3$ per bushel next year. Futures prices the following year would be expected to strengthen substantially further. That would result from sharply reduced U.S. corn carry-in stocks and the U.S. livestock industry's need to reduce corn feeding by 12 to $14 \%$ because of limited supplies. An even larger cut in corn feeding would be needed in the following year.

## Challenges in Forecasting Chinese Demand

Chinese demand historically has been very difficult to forecast. Figure 3 shows USDA's 10-year baseline projections of China's corn imports for the last several years, along with actual imports. Its actual imports in recent years have ranged from zero to only a small fraction of a million tons annually, except for 1994-95 and 1995-96 when adverse weather curtailed its corn production. It has been equally difficult to predict long-term Chinese trade patterns for wheat. In contrast to corn and wheat, China's soybean imports have trended strongly upward in recent years. It has had much more difficulty in increasing average soybean yields than its wheat, corn, and rice yields. Last year, however, China's corn yield was sharply reduced by drought and insect problems. Preliminary data show continuing low Chinese corn yields in 2001 because of early-season drought.

## Influences on Future Grain Sales to China

Optimism about future corn business with China stems partly from its huge population-nearly 1.3 billion personsand its sustained long-term economic growth. While China is required to shift to Tariff-Rate Quota systems (TRQ's) for grain, the TRQ's do not require it to import corn and wheat. They do, however, lock in tariffs at rates slightly below recent tariffs, up to the maximum TRQ, which will be slightly over 5 million tons ( 200 million bushels) of corn in 2002. China is required to liberalize its grain distribution system, allowing international firms to play a more important role in the internal marketing process. China also is required to phase out its corn export subsidies, which have been needed to keep its corn competitive in world markets. While this is widely expected to halt China's corn exports, one should note the restructuring of U.S. agricultural subsidies that has occurred in the last five years. China may well follow our example in changing its agricultural subsidies to meet WTO requirements.

Another complexity in forecasting the future of China's corn exports and imports is the impact of WTO on the flow of agricultural technology into China. WTO is quite likely to accelerate the technology transfer into its production and marketing sectors. Its agricultural technology is very backward by U.S. standards, with severe problems in marketing and transportation, weed and insect control, harvesting processes, soil fertility management, and crop breeding. These and
other problems help explain why, in a good year, China's average corn yield is only slightly more than half as large as in the U.S. With yields near those of the U.S., China would produce about 3 billion bushels more corn than it is currently producing.

Figure 1. China's Net Corn Imports


Bars above 0 indicate imports. below are exports.

Figure 2. Chinese Wheat Imports From All Sources, 1987-88 to 2000-01


Figure 3. China Gross Corn Imports \& USDA Projections


1961196619711976198119861991199620012006 $\rightarrow 1997 \rightarrow-1998 \rightarrow 1999 \rightarrow-2000 \rightarrow$ Actual

## Robert Wisner

