



# WEEKLY OUTLOOK

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## FEED USE OF CORN MUST BE LARGE

THE USDA WILL RELEASE A REVISED CORN PRODUCTION ESTIMATE on November 12. Because of the weather conditions during October, many observers expect the estimate to be increased modestly from last month, even though harvest progress has lagged behind the average rate. A crop in excess of 8 billion bushels makes it imperative that the rate of corn use be high during the 1981-82 marketing year. Corn exports are expected to be large--between 2.5 and 2.6 billion bushels. However, the key to using large quantities of corn is the domestic livestock industry.

Historically, the amount of corn used as feed has depended on three major factors: the number of livestock, the availability of other grains for feeding, and the level of profitability in livestock feeding. The level of profitability affects the feeding rate per animal. The amount of grain fed per grain-consuming animal unit (GCAU) has varied from 1.68 tons to about 2 tons over the last 12 years. The amount of corn fed per GCAU has ranged from 1.25 tons to 1.55 tons.

The lowest level of corn feeding per animal in recent history was in 1974-75. An early frost reduced available supplies and pushed corn prices very high early in the crop year. Feeding profitability was close to the low of the past 12 years.

Except for a few years, feeding profitability explains a high percentage of the variation in feeding rates. The high rate of feeding in 1972-73 with below-average feeding margins suggests that the late-harvested corn crop was overestimated. The price controls and subsequent heavy feeding of cattle in 1973 resulted in a high rate of grain feeding with the lowest feeding margin in recent history. The small feeding margins in the first half of the 1977-78 crop year resulted in a low annual rate of grain feeding even though feeding margins were excellent during the latter part of the year.

During the 1981-82 marketing year, feed use for corn will be enhanced by a high level of livestock production. Our early projections suggest that



meat production could be 1.5 to 2.0 percent above the record level of 1980-81. The increase in the production of other feed grains will provide more competition for corn feeding. The USDA expects feeding of these other grains to increase by 4.1 million metric tons, or nearly 23 percent. On the other hand, wheat feeding next summer probably will not reach the extremely high levels attained this past year.

It is clear that corn must be priced to encourage a high rate of feeding per animal if total feed use of corn is to be increased significantly from last year. The corn price that makes livestock feeding profitable depends on the price of livestock. It appears that continued high levels of livestock production and less than ideal economic conditions for consumers will keep pressure on livestock prices.

Assuming that feeding margins are about average, and that corn and soybean meal continue to be priced at the current ratio of 1 to 2 (on a per pound basis), we can calculate the "feed value" of corn based on alternative assumptions about livestock prices. If, on an average, livestock prices remain unchanged from last year, corn will have a feeding value of about \$2.50 per bushel. A 10 percent increase in livestock prices would make corn worth about \$2.80 (U.S. average). The most likely outcome will be somewhere between these two extremes.

Cash corn prices should increase seasonally but perhaps not above the level already offered by the futures market.

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