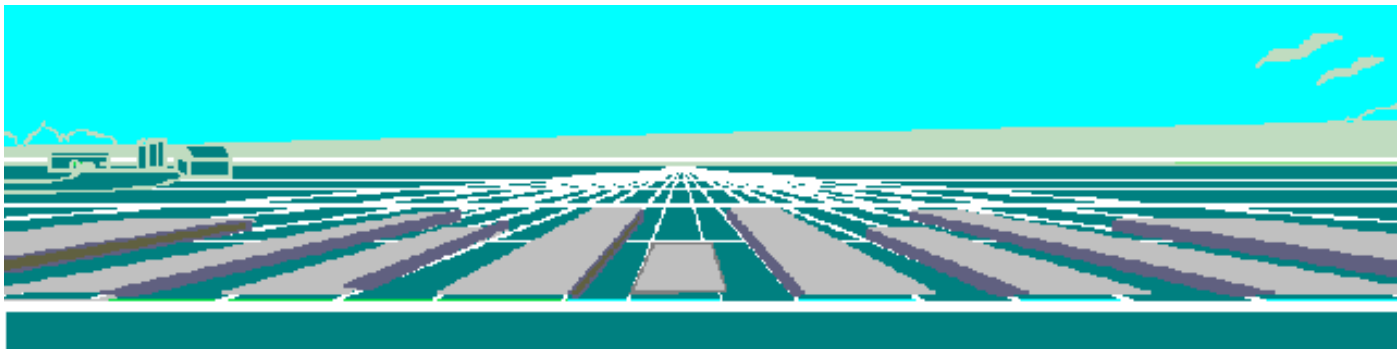
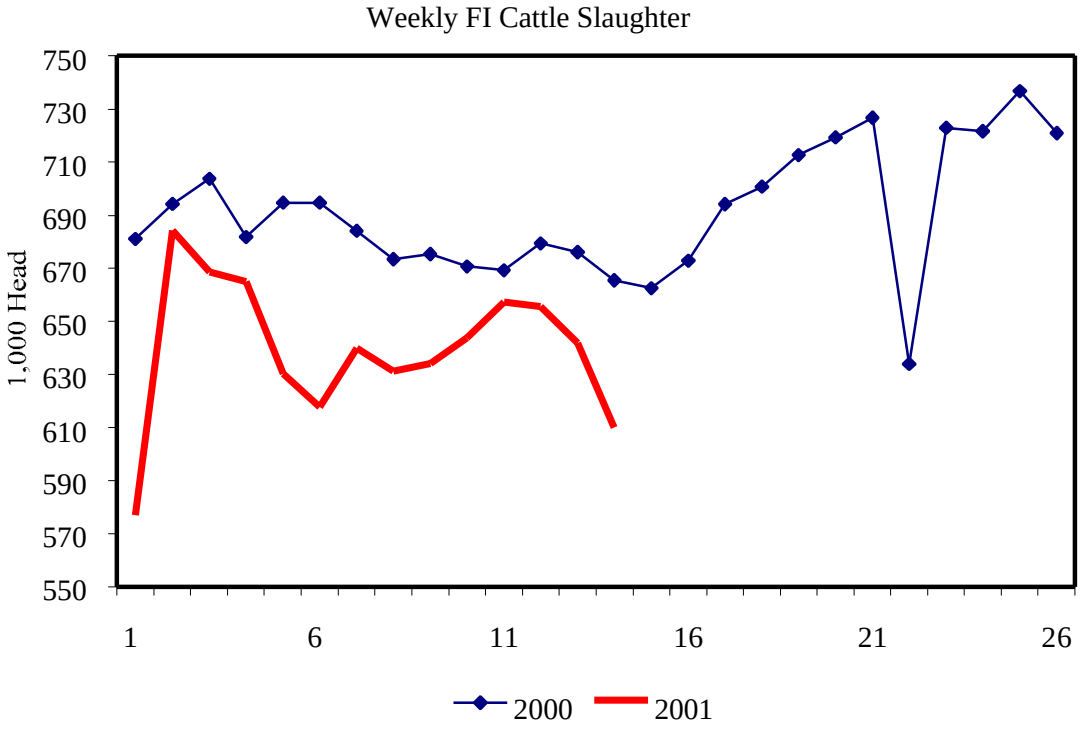


April 16, 2001 **Ames, Iowa** **Econ. Info. 1812**

CATTLE MARKET UPDATE

Fed cattle prices have backed off their seasonal high and are poised to work lower over the next 60 days or beyond. Year-to-date beef supplies are 7.2 percent lower than the same period the year before due to lower average weights and reduced slaughter. Cattle slaughter was 6.1 percent, 623,000 head, below the same period in 2000 (Figure 1). This difference is comparable to about one week's worth of slaughter.

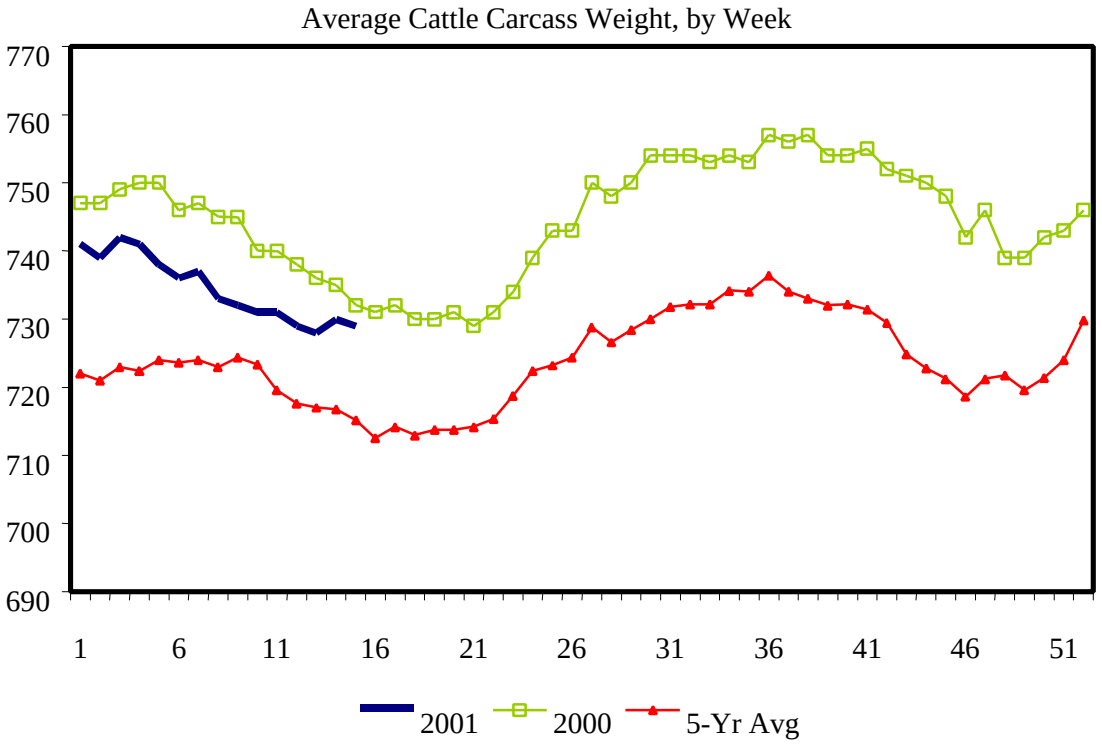
This lower slaughter level is of some concern considering the larger inventory of cattle on feed. The larger placement of calves last fall and the harsh feeding conditions will likely postpone marketings by two weeks or more. Thus, the increase in marketings could come a time of seasonally higher slaughter, resulting in a wider than normal price decline from the spring high to the summer/fall low.



If the recent strength in the fed cattle market is due to rationing the supply of cattle to the wholesale market, the bubble could burst on the eventually larger market. If, in fact, feedlot supplies are not as large as USDA reports, the summer price decline may not be as great as expected.

Other factors supporting prices are the average carcass weight and by-product values. Figure 2 shows average carcass weights have been running below those of a year ago but are set to resume their year-over-year increase that we have seen in recent years. Notice that we are near the seasonal low for carcass weights, and weights are expected to begin increasing

about the same time slaughter numbers increase. If the delayed marketings are due in part to holding cattle rather than weather reduced gains, the market impact could be quite significant.



By-Products Support Higher Cattle Prices

Source: Livestock Market Information Center

Usually when the values underlying fed cattle prices are discussed, the value of the beef meat is considered. Though smaller than the value of meat, by-product (drop) values also contribute to cattle value. Current cattle prices are being supported by both meat and by-product (drop) values. Calculated on a live slaughter steer basis, steer prices are the equivalent of $2.00 per cwt. above a year ago due to increased by-product values.

On a fed steer (live) basis, the USDA calculated the current by-product value at $9.88 per cwt. The last time the weekly drop value was over $9.00 per cwt. was in early May 1997 and the last value over $9.50 was in March 1997. In early 1998, by-product values collapsed (averaging about $6.65 per cwt) due to the Asian economic crisis. Most of the decline was the result of lost hide markets in Korea and other major hide processing countries.

Wholesale hide prices averaged about $95 per cwt. during March of this year. That was about $20.00 per cwt. more than a year ago and $26 per cwt. above the price in March 1999. Hides are the largest contributor to the cattle by-product value. Hides also have become an increasingly larger percentage of by-product value. Last month hides represented about 66 percent of estimated cattle by-product value, up from 62 percent a year ago and 58 percent two years ago. Besides hides, other relatively large components of by-product value include liver, tallow, and meat scraps.

So, why are hide values up? The major contributor has been reduced steer and heifer cattle slaughter. Also, there has been some renewed interest in using leather in the apparel industry. Hide values are expected to decline somewhat as slaughter levels pick-up over the next several weeks. Also, a slowing US economy may pull hide values down toward a year earlier. Still, by-product values will likely remain above those of a year earlier for at least several more months.

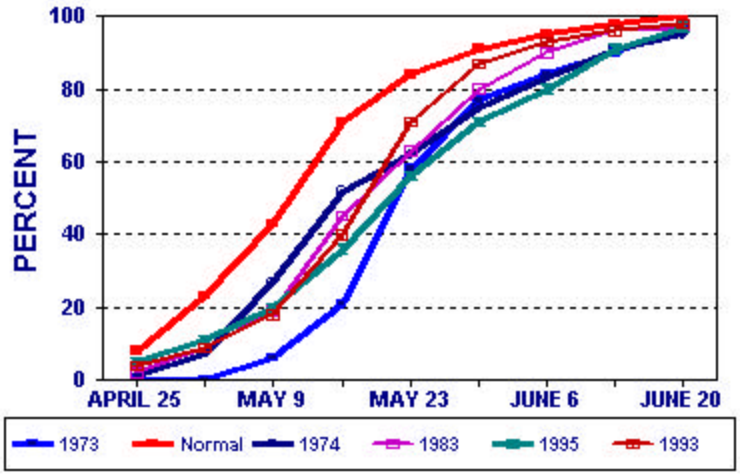
John D. Lawrence

DELAYED PLANTINGS: A THREAT TO 2001 CORN YIELDS?

Unusually late snow melt in Iowa and states to the north, northwest, and northeast, along with recent rains across the Midwest, have caused uneasiness about possible planting delays this spring. So far, this spring is a sharp contrast to a year ago when dry soils and drought forecasts led to unusually early plantings of both corn and soybean. However, it is still early in the season by comparison with most years. Normally by mid-April, only 5 percent of the nation's corn crop is planted. Most of the crop that is normally planted by this time is well below Iowa's southern border, with the greatest amounts planted being in Missouri, Texas, Tennessee, Kentucky, and North Carolina. Last year at this time, an estimated 9 percent of the U.S. corn crop was planted, along with two percent in Iowa.

Figure 1 shows the percent of the U.S. corn crop normally planted by various dates from late April through late May, and planting progress for the years of extreme late plantings since 1973. Out of these "wet spring" years, 1973 was by far the latest planting season. Keep in mind also that tillage and planting technology as well as equipment sizes has increased dramatically since then. With today's equipment, weed control, fertilizer application, tillage, and planting practices, over half of the U.S. corn crop can be planted in 7 to 10 days if weather cooperates.

FIGURE 1.CORN PLANTING PROGRESS, MAJOR STATES, SELECTED WET YRS.& NORMAL



Yields in Late-Planting Years

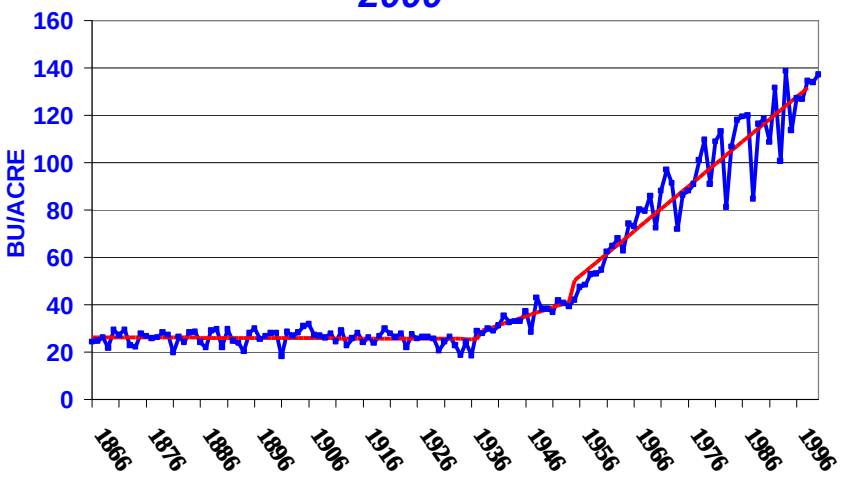
Agronomic research clearly indicates that late planting in individual fields and on individual farms reduces the yield potential, provided all other conditions are constant. At the national level, a relevant question is whether the extra moisture that delays plantings will offset otherwise negative yield effects. To help answer that question, U.S. corn yield percentage deviations from the long-term trends in Figure 2 for the late-planting years are shown below.

U.S. Average Corn Yield, Deviation From Trend, Late Planting Yrs.

1973	8.2%
1974	-16.7%
1983	-21.5%
1993	-17.6%
1995	-9.9%
Avg.	-11.5%

In four of these five years, a wet spring was followed by additional weather problems later in the season that contributed strongly to low yields. For example, 1974 included a mid-to-late summer drought and a Labor Day frost in the northern Corn Belt, including northern Iowa. The spring of 1983 was followed by a summer drought. In 1993, cool and wet conditions continued through the growing season, causing extreme record western Corn Belt flooding, disease and other problems for both corn and soybeans. In 1995, drought followed delayed plantings in some southern parts of the

Figure 2. U.S. CORN YIELD 1866-2000



Midwest. The Year 1995 also was accompanied by a 10% acreage set-aside requirement in the federal farm programs, along with the 0/92 program that encouraged farmers to abandon land with low yield potential. While these data indicate there has been a strong tendency to associate serious planting delays with low U.S. yields, it is too early to read mid-April planting delays as a forerunner of similar problems this year. Weather and planting progress in the next three to four weeks will be major determinants of this year's potential U.S. average yields.

International Developments

In USDA's April 10 World Grain and Oilseed Supply-Demand Report, indicated soybean production in Argentina for this spring was raised another one million tons (36.8 million bushels) from last year. That brings the Argentine soybean crop up to a staggering 22.6 percent increase over last year's record crop. Despite widespread farm media publicity about expansion in Brazil's soybean crop, its production is indicated to be up only 4.4 percent from last year, with the increase due to better weather and higher yields in the South than last year. Combined South American soybean production in these two countries plus Paraguay, Uruguay, and Bolivia is expected to be about 250 million bushels larger than last spring. The potential increase over last year in U.S. soybean production, with expected plantings nearly three million acres above 2000, would be about 185 million bushels. That would push Western Hemisphere production about 435 million bushels above last year, excluding a possible small increase in Canada. Other major soybean producers are India and China. The average annual growth in World soybean utilization over the last decade has been approximately 240 million bushels per year.

While the prospective world soybean supply picture points to likely depressed soybean prices unless adverse U.S. weather intervenes, there are some positive demand developments. Most significant is the EU ban on meat and bone meal feeding, which is expected to be extended from June 30 through the rest of the year. A ban on U.S. feeding of meat and bone meal is under consideration. U.S. feeding of these products currently is prohibited for cattle and sheep, but is allowed for hogs and poultry. A U.S. ban would generate additional soybean meal demand approximately equal to the meal from 125 million bushels of soybeans. It appears that the EU ban is generating a modestly larger increase in meal demand. On the oil side, much of the increase in Argentine soybean plantings came from a shift out of sunflowers. Sunflowers have over twice the oil content of soybeans, but have lower meal yield and quality. Demand for rapeseed oil for biodiesel appears to be strong in Europe. Additionally, we noted in an earlier issue of this newsletter that Malaysia had announced plans to use 400,000 metric tons of palm oil for biodiesel or power plant fuel. However, prices of palm oil have increased since then and are expected to limit the amount of palm oil used for these purposes—perhaps to around 50,000 metric tons. That's equivalent to the oil from about 10 million bushels of soybeans, a very small amount compared with the expected U.S. soybean crushings of nearly 1.6 billion bushels this year.

USDA left its projection of South Africa's spring 2001 corn harvest unchanged from last month, but 121 million bushels or 29 percent below last year because of adverse weather and reduced plantings. USDA's World Agricultural Outlook Board raised its estimate of Argentine corn production by 39.4 million bushels from last month. However, the Argentine corn crop estimate is down 7 percent or 47 million bushels from last year. While these two countries will have significant impact on U.S. corn exports for the year ahead, other areas where this year's crop size will be a major influence on our export potential include Eastern Europe and China. The current USDA estimate shows that Eastern Europe's 2000 feed grain crop was 680 million bushels below the previous year and 648 million bushels below the preceding five-year average production. Eastern Europe has been an exporter of corn and other feed grains in recent years, but was unable to export this season because of poor crops resulting from last summer's drought. USDA estimates that China's 2000 corn crop declined by 910 million bushels from the previous year, and was 630 million bushels below the preceding five-year average, due partly to adverse weather and insect problems. Impacts of production in these two regions on world corn exports appear likely to be much greater than those from Argentina and South Africa. Additionally, Brazil's corn crop to be harvested this spring is estimated to be up about 240 million bushels from last year. It reportedly is essentially all non-GMO and is finding strong demand in Japan, South Korea, and Spain and Portugal. Trade sources there expect Brazil to export about 80 to 95 million bushels of corn from May through November. In recent years, Brazil has been an importer rather than exporter of corn.

Balance Sheets

Our updated corn and soybean balance sheets are available at: http://www.econ.iastate.edu/faculty/wisner/GrainBalance/BAL2001.pdf. Column B represents the potential supply, demand and price situation for the year ahead with approximately normal yields. For corn, the normal yield situation shows a small decline in carryover stocks by August 31, 2002. For soybeans, stocks are projected to rise significantly with normal yields. The long-run probabilities at

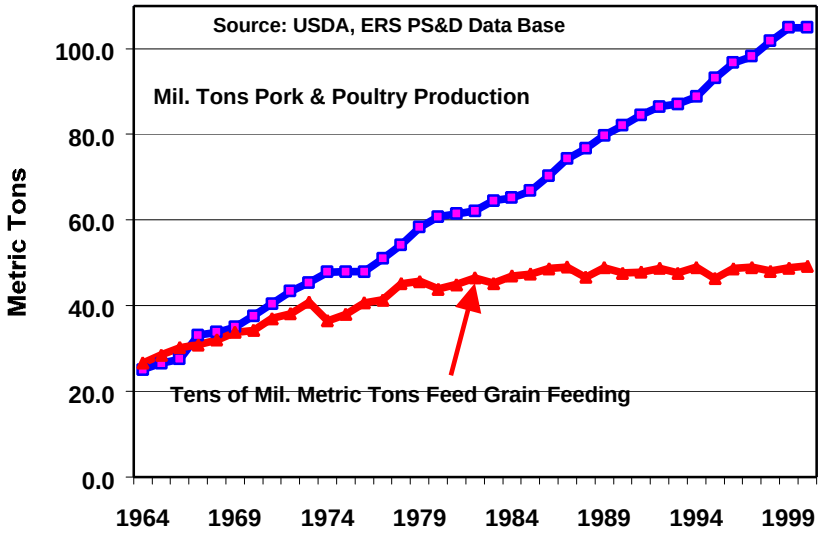
the bottom of the balance sheets show the approximate percent of the time that national weather conditions since 1974 would have produced a yield percentage approximately equal to or deviating from the long-run trend by plus or minus a few percentage points from the respective column yields.

Long-run Developments

Figure 3 shows the long-run trend in world feed grain feeding and pork and poultry production, based on USDA data. We have excluded China because some economists believe (with good justification) that the Chinese data may contain serious errors. Either with or without the Chinese data, the numbers show a strong increase in world feed conversion efficiency over the last few decades. It is well known that such an increase in feed conversion efficiency has occurred in the U.S. pork and poultry industries, and this chart indicate it has not been unique to U.S. agriculture. Factors contributing to the increase include: (1) an increase in poultry's relative share of meat production, (2) a strong increase in soybean meal feeding, (3) improved ration formulation, and (4) improved livestock and poultry genetics. In years past, we have worked on projects in other countries where the normal time from birth to market for hogs was over a year, due in considerable part to very low protein contents for rations. However, that has changed substantially in recent years.

Another area of major uncertainty is the size of China's grain stocks. A recent United Nations Food and Agricultural Organization (FAO) bulletin reportedly placed Chinese grain stocks at an extremely large 365 million metric tons (14.4 billion bushels, corn equivalent). China reportedly is re-surveying its stocks to get an updated reading. In a visit to China last spring, government officials and researchers there stressed that food security was extremely important to the Chinese government, and that stocks were large. One facility we visited had 30 million tons of storage capacity. That's 1.18 billion bushels corn equivalent, equal to about 69 percent of the August 31, 2000 U.S. corn carryover. We were told that this facility was one of 29 in that province alone, although the others were smaller. If the FAO estimate of China's grain stocks is correct, China could have more corn to export this summer than USDA estimates would indicate.

Figure 3. World Combined Pork & Poultry Production and Feed Grain Feeding, Excluding China1964-2000



Robert Wisner