STATUS OF WISCONSIN AGRICULTURE, 2002

Current Wisconsin Farm Financial Conditions

Situation and Outlook for Farm Products and Inputs

Special Articles

- *The Macroeconomic and Policy Environment Created by the Events of September 11, 2001*
- *A Review of Wisconsin's Farmland Use-Value Assessment Program*
- *Status of the Wisconsin Cranberry Industry*

Department of Agricultural and Applied Economics
College of Agricultural and Life Sciences
University of Wisconsin-Madison

Cooperative Extension
University of Wisconsin-Extension

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An Annual Report by:

Department of Agricultural and Applied Economics
College of Agricultural and Life Sciences
University of Wisconsin-Madison

and

Cooperative Extension
University of Wisconsin-Extension

PREFACE

Status of Wisconsin Agriculture is an annual agricultural situation and outlook report authored by faculty in the Department of Agricultural and Applied Economics. The report contains three parts. Part I provides a brief overview of the financial environment in the Wisconsin farming sector. In Part II, market analysts review current conditions in major Wisconsin commodity sub-sectors and offer their forecasts for 2002. Part III contains special articles dealing with longer-term issues facing Wisconsin agriculture.

Additional copies of this report may be purchased for $5.00 each, including postage. Send requests to Ms. Linda Davis, Department of Agricultural and Applied Economics, UW-Madison, 427 Lorch Street, Madison, WI 53706. Copies may also be downloaded free from the Internet in either Adobe Acrobat® or MS-Word® format at http://www.aae.wisc.edu/www/pub/

The faculty of the Department of Agricultural and Applied Economics welcomes your comments and questions on material in this report. We also encourage your suggestions on rural Wisconsin issues that we might address in subsequent editions.

Acknowledgements

Major funding for *Status of Wisconsin Agriculture* was provided by generous contributors to the University of Wisconsin Foundation. The College of Agricultural and Life Sciences provided supplementary finding. We also wish to thank Robert Mitchell, Department of Life Sciences Communication, for his excellent editorial and production assistance.

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January 2002

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SUMMARY

Farm income statistics released in mid-2001 documented what most Wisconsin farmers already knew very well: 2000 was a devastating year. At $350 million, net farm income was at its lowest level since 1955, and in real (deflated terms), the lowest since farm income statistics have been reported. Even more disturbing, Wisconsin net farm income in 2000 included more than $600 million in direct government payments under various farm income support programs. Absent this infusion of government cash, farmers as a whole would have shown a quarter-billion-dollar net loss in 2000.

The dismal Wisconsin farm income picture in 2000 emphasizes the importance of dairying within the state's enterprise mix. Milk sales account for more than half of Wisconsin farm cash receipts, and milk prices were in the tank during all of 2000. As a result, dairy farmers saw their milk income fall by 14.5 percent from 1999.

The farm income picture in Wisconsin was much brighter in 2001. While we won't know the full story until July 2002, when final income estimates are published, we do know that:

- Milk prices were much stronger in 2001. While it will not surpass the record level of $15.50 per hundredweight in 1998, the Wisconsin all-milk price will average about $15.00 for the year, up $3.30 from 2000. This will add about $730 million to cash farm receipts compared to the previous year.

- Cattle prices slid dramatically in the final quarter of 2001. But high first-half prices mean that choice cattle prices will average about $2 per hundredweight higher than 2000. Slaughter cow prices will be up even more, around $2.50. Hog prices are expected to average about $1 higher than 2000. Farm-level broiler prices will be up about 3 cents per pound, while turkey prices are expected to average about 3.5 cents per pound lower.

- Corn and soybean prices showed little strength in 2001. USDA is forecasting prices for the 2001 corn crop at about par with 2000 and soybeans down a few cents per bushel. Loan deficiency payments, market loss payments, and transition (AMTA) payments continued to provide major supplements to market returns for grain and soybean producers in 2001.

- Burdensome stocks caused cranberry growers to suffer from prices below production costs for the second year in a row in 2001. Sharply lower potato production nationally strengthened farm prices for the slightly lower Wisconsin crop.

- Farm production expenses were down in 2001, due largely to easing crude oil prices and the resulting effect on prices for fuel and other petroleum-based farm inputs. Eleven Federal Reserve Board reductions in interest rates during 2001 translated to lower interest rates on farm real estate and operating loans.

Putting this all together, we estimate that Wisconsin net farm income in 2001 will be near $1 billion, about three times the depressed 2000 level.

The outlook for 2002 is murky for two main reasons. First, the effects of the tragic events of September 11, 2001, and the related economic recession are still being played out, resulting in many uncertainties. After 10 years of sustained economic growth, our ability to forecast the impacts of a recession – especially one accompanied by vastly increased federal expenditures – has diminished.

Second, the agricultural policy environment is very uncertain. Wisconsin farm income has become increasingly dependent on direct government payments. The U.S. Senate has yet to pass a farm bill. What the Senate has considered to date is at odds with both the already-passed House version and guidelines of the Bush administration. This promises to create a contentious conference committee process and a potential presidential veto. And even when a farm bill is passed and signed into law, there is considerable uncertainty about the appropriation of funds for farm payments that might be authorized by the bill.

Despite uncertainties with respect to macroeconomic conditions and farm policy, we predict the following in 2002:

- Milk prices will not average as high as 2001, but neither will they fall to their very low 2000 levels. Increases in the U.S. dairy herd will be impeded by the availability of replacement heifers, but milk per cow will likely be above trend. Consumption is expected to grow in the range of 1.5 percent to 1.75 percent. The net result will be farm milk prices averaging about $1.00 per hundredweight below the near-record 2001 level but above the five-year average.

- We expect slaughter cattle prices to be very close to 2001 levels on average, but they will not exhibit the extreme highs and lows of last year. Feeder cattle prices will be a bit lower. Hogs will trade lower on average, perhaps as much as $3 or $4 per hundredweight under 2001.

- The new farm bill will influence corn and soybean plantings. If current loan deficiency payment relationships between corn and soybeans continue, there will likely be a further shift in acreage from corn to beans. This would raise corn prices slightly and keep downward price pressure on soybeans.

- Cranberry prices will strengthen in 2002, but perhaps not to profitable levels for most growers. The recession will mean more at-home meals, which should bolster farm prices for staples like potatoes and canning crops.

- Prices for farm production inputs will be generally lower than 2001. Credit will be readily available and less costly for qualified borrowers. Land rents are expected to be close to those experienced in 2001.

On net, Wisconsin farmers are not expected to fare as well in 2002 as they did in 2001, but will be much better off than in 2000. Market price predictions for 2002 suggest net farm income in the range of $700 million to $1 billion. The hole card is federal farm payments. Major changes in programs or federal spending authorization could substantially alter our income projection.

In spite of a disturbing downward trend in net farm income, the overall balance sheet of Wisconsin farmers has shown a continual improvement over the last five years, at least as measured by such conventional indicators as debt/asset and debt/equity ratios. However, the gain in assets shown in the balance sheet is nearly all in farmland value appreciation. This is a paper gain for farmers who remain in farming, and could be rapidly eroded if speculative pressure by non-farm investors dissipates.

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The three special articles in this year's report address diverse long-term issues affecting Wisconsin agriculture. William Dobson discusses how the macroeconomic and agricultural policy environments have been altered by the September 11, 2001, terrorist attacks and their aftermath. Bruce Jones reviews Wisconsin's use-value farmland assessment program, which has been used to assess farmland property taxes for the last four years. Ed Jesse provides an economic perspective on the Wisconsin cranberry industry, focusing on the recent boom and bust in grower returns.

I. Financial Situation in the Wisconsin Farm Economy

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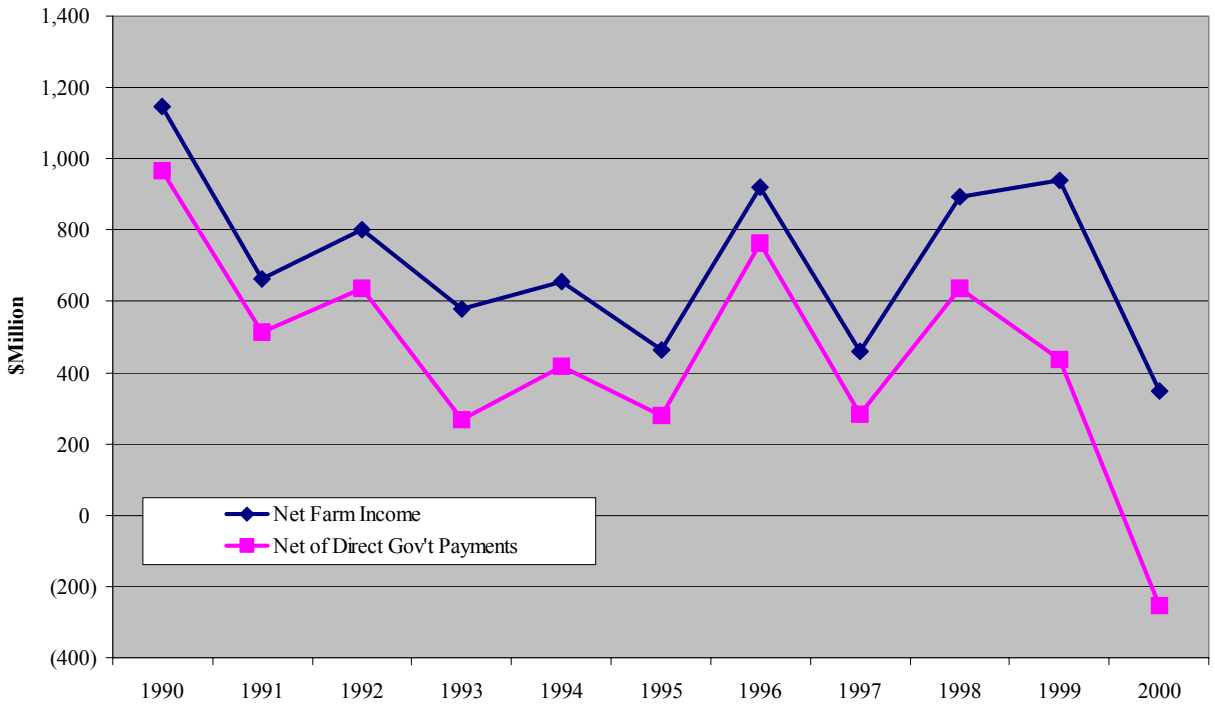
In 2000, Wisconsin farmers experienced their lowest net farm income since 1955. The bottom line showed less than $350 million, just over one-third of the $940 million garnered in 1999. Even more troubling, the $350 million net income included more than $600 million in direct government payments for row crops and dairy. Without these green checks, Wisconsin farmers as a whole would have shown red ink in the amount of $250 million.

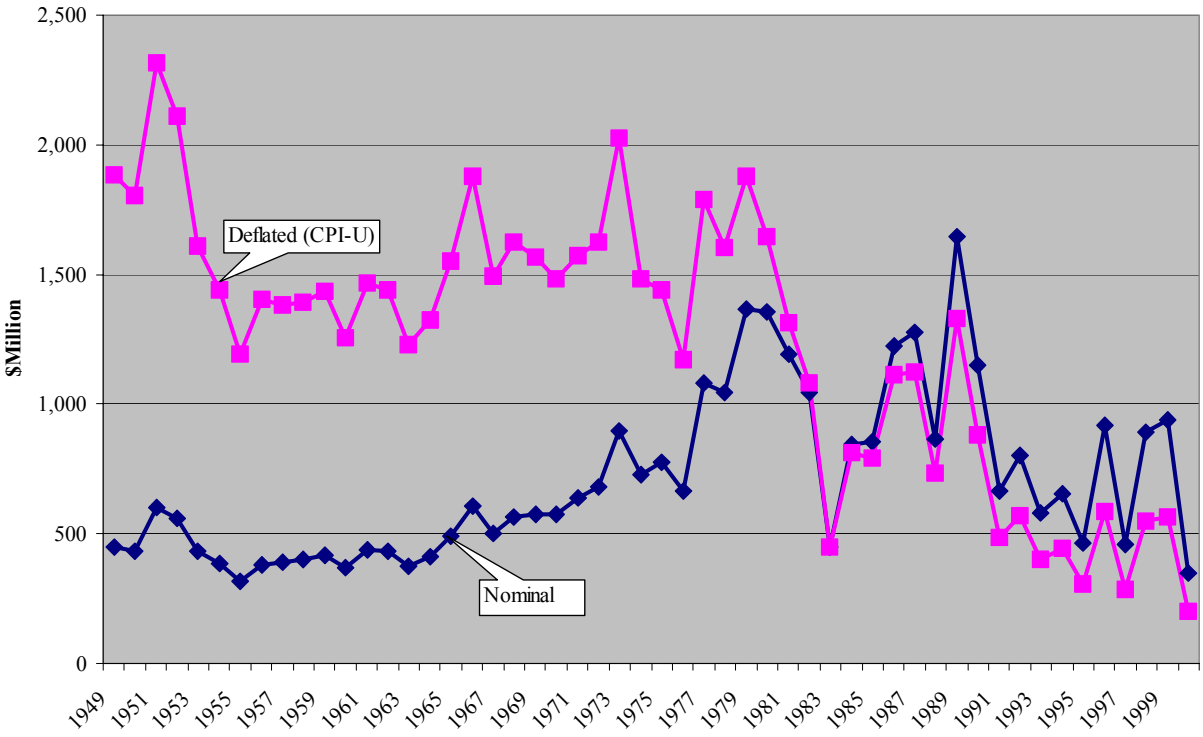
Most of the huge falloff in net income from 1999 is attributable to much lower milk prices. Gross dairy income was down $457 million from the previous year, offsetting slightly higher sales for other livestock and crops (with the exception of fruit crops). The other main contributing factor was higher operating expenses, especially petroleum-based inputs (+$65 million), labor (+$57 million), real estate taxes (+$19 million), and interest (+$21 million).

The net loss experienced by Wisconsin farmers in 2000 highlights a more chronic earnings problems dating back more than a decade. Net farm income has been trending downward since 1990, primarily because farm output prices have been decreasing while input costs have steadily risen. This is a disturbing trend, softened only by the fact that there are fewer commercial farmers dependent on aggregate net farm income to support their families.

Wisconsin Net Farm Income



Wisconsin Net Farm Income, Nominal and Deflated

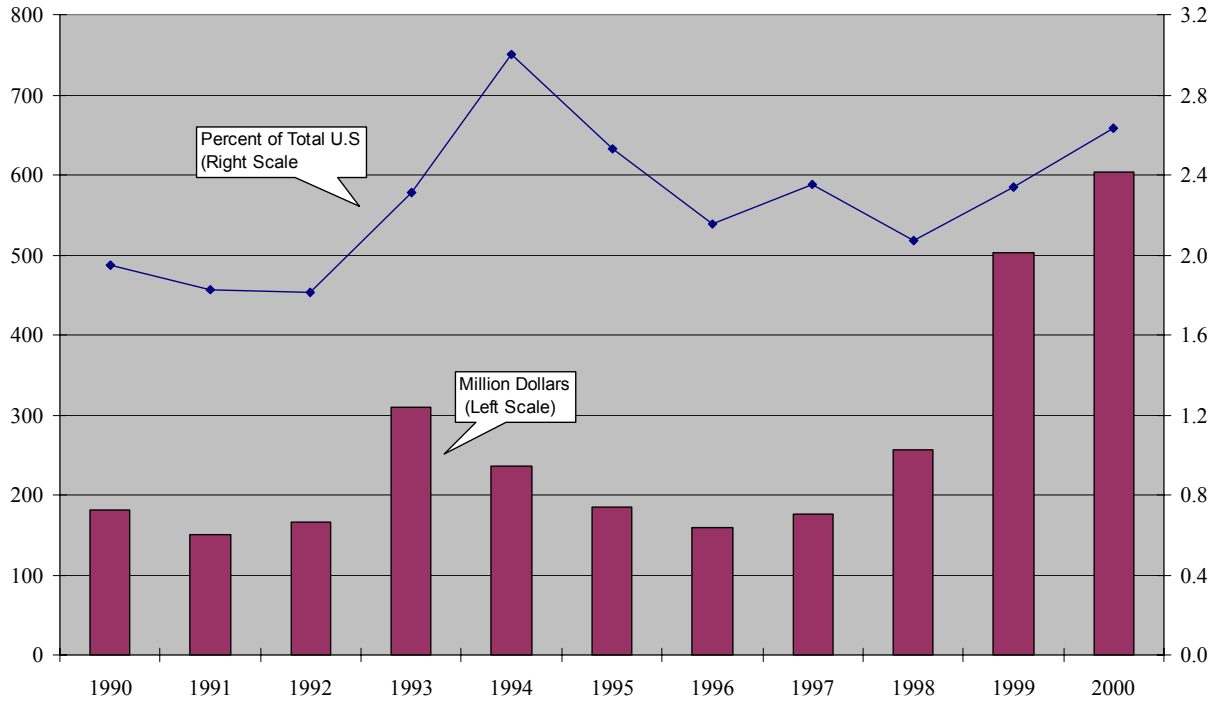


Wisconsin farmers have become more dependent on federal farm payments as a source of income. Payments in 1999 and 2000 were especially large because of high market loss payments to grain farmers and the first-time availability of market loss payments for dairy farmers. Cutbacks in federal farm payments could translate into much lower incomes for Wisconsin farmers. And the availability of federal funds for farm programs has become problematic in light of other federal budget outlays.

It is important to note that government payments to Wisconsin farmers remain small compared to many other states – both in absolute terms and relative to cash receipts from farm marketings. In 2000, Wisconsin farmers received 2.6 percent of the total direct payments under USDA farm programs and the $603 million received constituted 11.6 percent of cash receipts. North Dakota farmers received $1.2 billion in 2000, representing more than 5 percent of total payments and 35 percent of farm cash receipts.

Wisconsin farm income in 2001 will be much improved over 2000. State milk prices are expected to average about $15 per hundredweight in 2001, $3.30 higher than 2000 (see dairy outlook). Higher milk prices will add over $700 million to farm cash receipts. Most input prices will also average lower. For 2002, lower milk prices compared to 2001 will be partially offset by lower costs for farm credit and fuel and petroleum-based inputs. Farm program payments remained high in 2001. The status of farm payments in 2002 is unknown at this time.

Direct Government Payments to Wisconsin Farmers



Despite very poor earnings in 2000, Wisconsin farmers' aggregate balance sheet continued to strengthen. At the end of 2000, Wisconsin farm assets were valued at $36.3 billion, while total farm debts were roughly $6.2 billion. This yielded an aggregate equity (net worth) of approximately $30 billion. The debt-to-asset ratio for the farm sector was .17 to 1 – Wisconsin farmers owed only 17 cents for each dollar of assets they owned. This relatively low debt-to-asset position indicates that, in the aggregate, the farm sector is being financed with equity rather than debt.

The balance sheet shows that between 1997 and 2000, the equity of Wisconsin farms rose approximately $9 billion, from under $21 billion to over $30 billion. This growth in equity is equivalent to earning a return on investment of nearly 13 percent per year. This is on par with the returns that were being yielded by U.S. stock markets before they went into a slump in early 2001.

Given the low net incomes reported for Wisconsin farms in recent years, a good question is how it was possible for farmers' equity grow at an annual rate of 13 percent. The answer is simple: appreciation in farm real estate values. The value of farm real estate has steadily increased across all reported years and increased by $10 billion during the 1997-2000 period. Because of real estate appreciation, farmers have been able to build equity despite low net farm incomes over the last few years.

Total borrowing by Wisconsin farmers has risen slowly but steadily since 1996. The increase in debt is not surprising given that net farm income has been

rather meager the last four years. Low earnings have forced many farmers to borrow more money to cover the cash flow deficiencies from year to year. Appreciating farm asset values have provided the collateral farmers needed to obtain additional credit. If farm income levels continue to remain low, farmers will be under pressure to borrow more money to stay in business. They will only be able to do this, however, if farm real estate values keep rising or hold constant.

Wisconsin Farm Balance Sheet, 1996-2000

Item	*1996*	*1997*	*1998*	*1999*	*2000*
Farms (No.)	79,000	79,000	78,000	78,000	77,000
Farm assets ($Bil.)	26.0	26.3	28.0	32.5	36.3
Real estate	15.6	16.5	18.1	22.3	26.3
Livestock and poultry	2.7	2.6	2.9	3.2	3.1
Machinery and motor vehicles	4.5	3.8	3.8	3.8	3.8
Crops	1.2	1.3	1.1	1.0	0.9
Purchased inputs	0.2	0.3	0.3	0.2	0.3
Financial	1.8	1.8	1.8	1.9	2.1
Farm debt ($Bil.)	5.4	5.6	5.8	5.9	6.2
Real estate	2.6	2.7	2.9	3.0	3.1
Farm Credit System	0.7	0.7	0.8	0.8	0.8
Farm Service Agency	0.1	0.1	0.1	0.1	0.1
Commercial banks	1.0	1.1	1.2	1.3	1.4
Life insurance companies	0.1	0.1	0.1	0.1	0.1
Individuals and others	0.7	0.7	0.7	0.7	0.7
CCC storage & drying loans	0.0	0.0	0.0	0.0	0.0
Nonreal estate	2.7	2.9	3.0	2.9	3.1
Farm Credit System	0.8	0.8	0.8	0.8	0.9
Farm Service Agency	0.2	0.2	0.1	0.2	0.2
Commercial banks	1.2	1.3	1.3	1.3	1.4
Individuals and others	0.6	0.6	0.6	0.7	0.7
Equity ($Bil.)	20.6	20.7	22.2	26.6	30.2
Ratio:					
Debt/equity	0.26	0.27	0.26	0.22	0.21
Debt/assets	0.21	0.21	0.21	0.18	0.17

Source: Economic Research Service/USDA.

II. Current Outlook for Wisconsin Agricultural Commodities and Inputs

In this section, marketing and farm management specialists in the Department of Agricultural and Applied Economics offer their insights on economic conditions for Wisconsin agriculture by commodity sub-sector. Interested readers are encouraged to contact these specialists for more current or more detailed information.

Dairy

Bob Cropp (608) 262-9483

Background:

Federal policy supports farm level milk prices for manufacturing-use milk at $9.90 per hundredweight (3.67 percent fat test). This is a low safety net for dairy farmers. At this low level market forces determine farm level milk prices most of the time. And since milk is a perishable product, relatively small changes in either milk production or milk and dairy product consumption result in large changes in farm milk prices. This not only makes forecasting milk prices difficult, but also exposes dairy farmers, milk processors and marketers to considerable price risk.

The last four years illustrate the volatile nature of milk prices. During 1998 a small 0.8 percent increase in milk production coupled with a 2.3 percent increase in commercial disappearance pushed the Basic Formula Price (BFP)[1] from $10.88 per hundredweight in May to a record $17.34 in December, a change of $6.46. The average all-milk price received by Wisconsin farmers was a record $15.50 per hundredweight.

In 1999, milk production climbed 3.5 percent, slightly outpacing a 3.2 percent growth in commercial disappearance. The BFP dropped to $10.27 in February, reached a record $16.26 for the month of September, and ended the year at $9.63 after a drop of $6.53 in 3 months. The average all milk price for 1999 was $13.80.

Milk prices remained depressed all of 2000, with the Class III price ranging from a low of $8.57 in November to a high of just $10.76 in September. The average all milk price was $11.70. But with milk production declining in 2001 and commercial disappearance remaining relatively strong, the Class III price set monthly records in May ($13.83), June ($15.02) and July ($15.46) and near records in August ($15.46) and September ($15.90). The Class III price declined to $14.60 in October and $11.31 in November and ended the year at $11.80 in December.

[1]The BFP was the estimated price paid to farmers by Minnesota and Wisconsin manufacturing milk plants for Grade B milk at 3.5 percent butterfat test. The BFP was replaced January 1, 2000, with the Class III price. Class III is a USDA-calculated price using a component pricing formula for milk used to make cheese. Since the BFP represented predominately pay prices of cheese plants, Class III is comparable to the BFP.

So where will milk prices be in 2002? It will depend on the level of milk production and commercial sales.

Review of 2001:

Dairy farmers do respond to the level of milk prices. Relatively high milk prices and cheap feed during 1998 and most of 1999 encouraged major expansion of the nation's dairy herd that lasted throughout most of 2000. While the nation's milk cow numbers normally decline 0.5 to 1.0 percent annually, they *increased* 0.1 percent in 1999 and another 0.6 percent in 2000. Milk cow numbers did not stop increasing until October of 2000 and did not drop below previous year levels until March 2001.

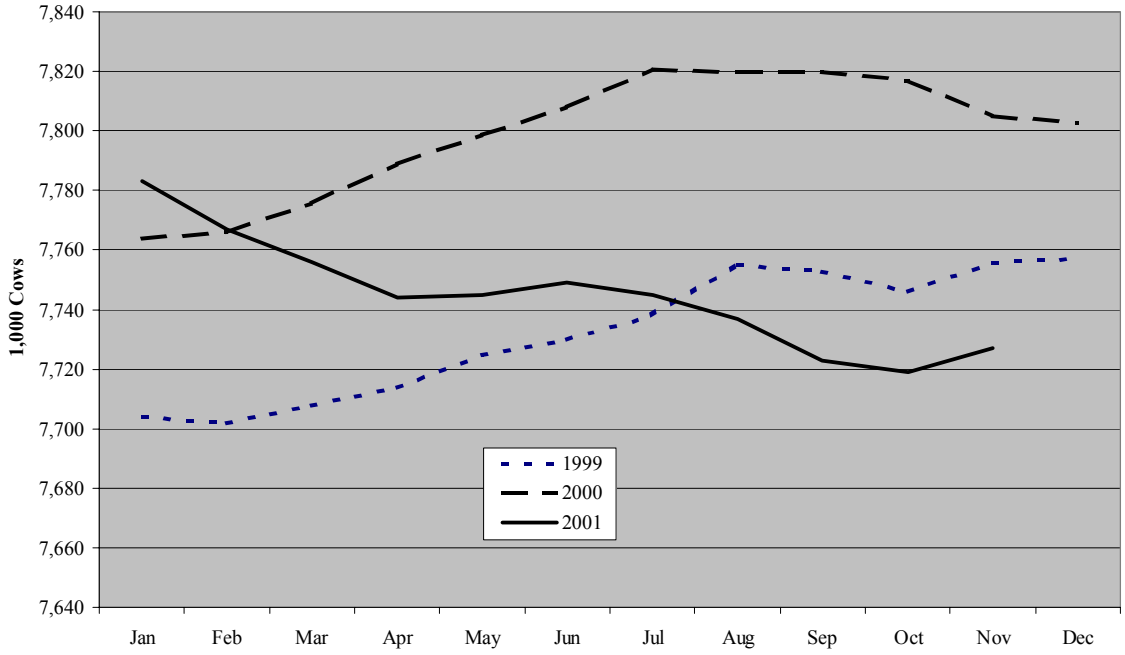
Despite much lower milk prices near the end of 1999 and all of 2000, earlier decisions to expand dairy operations were carried out. New dairy facilities were completed and filled with milk cows. But with time, low milk prices slowed additional expansions and encouraged many dairy farmers to exit dairying. As a result, cow numbers have been declining 0.5 to 1 percent annually since October 2000. As of November 2001, the national milk cow herd was 9.1 million head, down 125,000 head or 1.4 percent from year earlier.

The drop in cow numbers has been even more pronounced in Wisconsin. From January to November 2001, Wisconsin milk cow numbers dropped by 42,000 head (3.2 percent) and at 1.28 million head were 4.0 percent below last year. This sharp decline in cow numbers raises a major concern as to the future of the state's dairy industry.

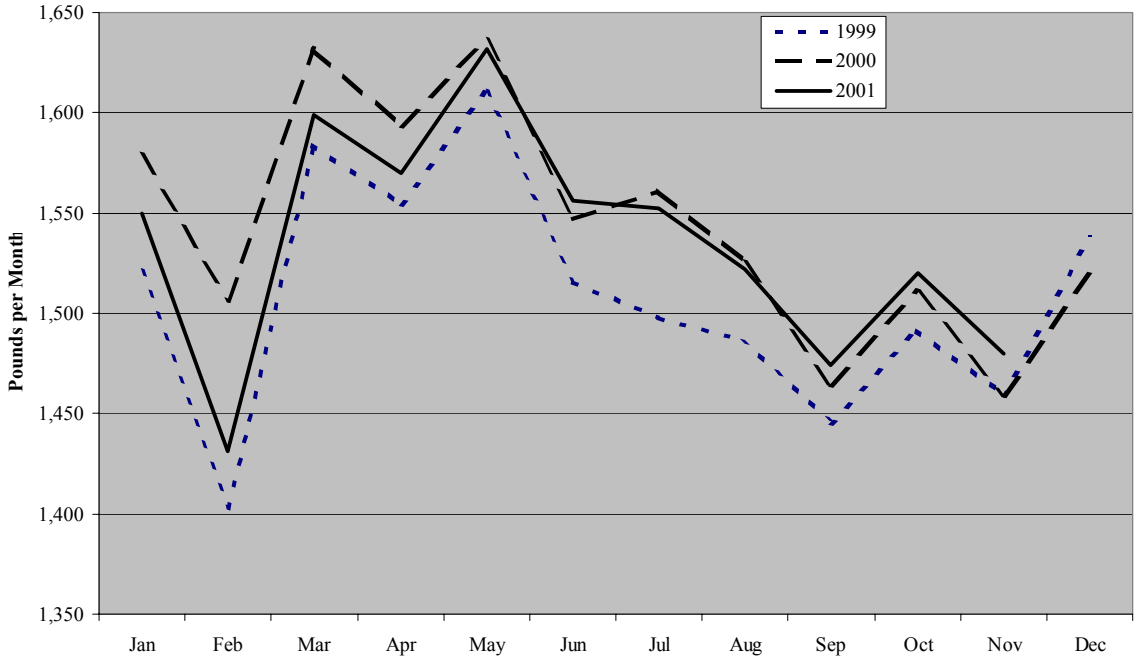
U.S. average milk yield per cow normally increases about 2 percent per year. But a combination of excellent weather and feed supplies pushed milk per cow up 3.4 percent in 1999 and another 2.4 percent in 2000. The story was different in 2001. Milk per cow was lower than a year ago nearly every month from January through August. Yields started to improve some by September. For the period January through November milk per cow averaged 0.5 percent below a year ago. For this same period milk per cow in Wisconsin showed virtually no change.

Since much of the improvement in milk prices during 2001 was due to relatively poor milk production per cow, a major factor determining the level of milk prices for the months ahead will be when increases in milk per cow return to more normal levels. The poor performance in milk per cow has been fairly widespread across key dairy states. What is the cause? Weather, while not as good as 1999 and 2000, was not particularly adverse for cow comfort or herd health – neither overly hot for long periods nor unusually wet. But poor harvest conditions reduced the overall quality of forages in Western, Northeastern and Upper Midwest states. And dry weather substantially cut harvests of hay and corn silage in much of the Northeast. Limits on irrigation due to energy problems in California reduced alfalfa production in much of the far West. Poor quality forages may be partially offset by increased grain and concentrate feeding, but milk per cow normally still suffers. So the feeding of poorer quality forages is not only affecting milk per cow currently, but also will be a factor this winter.

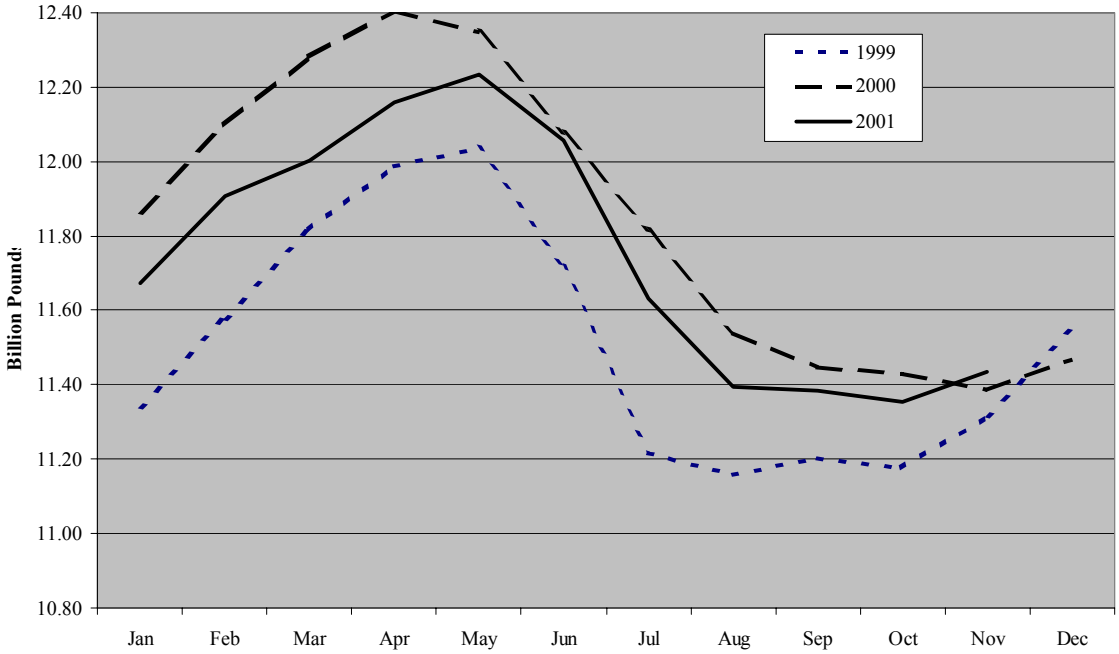
Number of Milk Cows, 20 States, 1999-2001



Milk per Cow, 20 States, 1999-2001



Total U.S. Milk Production, 1999-2001



A second possible explanation for poorer milk per cow is the supply of and price of dairy replacements. The major dairy expansions of 1999 and 2000 resulted in a strong demand for dairy replacements and drove up replacement cost to the $1,800-to-$2,000 per head range. Many existing dairy operations that normally purchase a majority of their dairy replacements kept older cows around longer. So a larger number of late lactation cows may explain lower milk per cow, particularly among the larger herds in the West.

The combination of declining cow numbers and poor performance in milk per cow meant that, relative to 2000, less total milk was produced in each of the first 10 months of 2001. November showed a slight increase, 0.4 percent. Total production for January through November was down 1.3 percent. For Wisconsin, production was down 4.4 percent. Not until milk per cow increases to offset the decline in cow numbers will total milk production once again start to increase.

Less total milk production in the U.S. and relatively good commercial disappearance of milk and dairy products resulted in the favorable milk prices April through October 2001. But with no major increase in milk production foreseen in the near future, why the sharp decline in milk prices for November and December?

As noted above, the change in milk prices during 1998-2000 and for most of 2001 can be explained by changes in milk production. Led by cheese sales, commercial disappearance maintained strong growth during the entire period. But commercial disappearance is affected by growth in the economy and personal disposable income.

Wisconsin Farm Level Milk Prices, 2000 and 2001
(Dollars per Hundredweight)

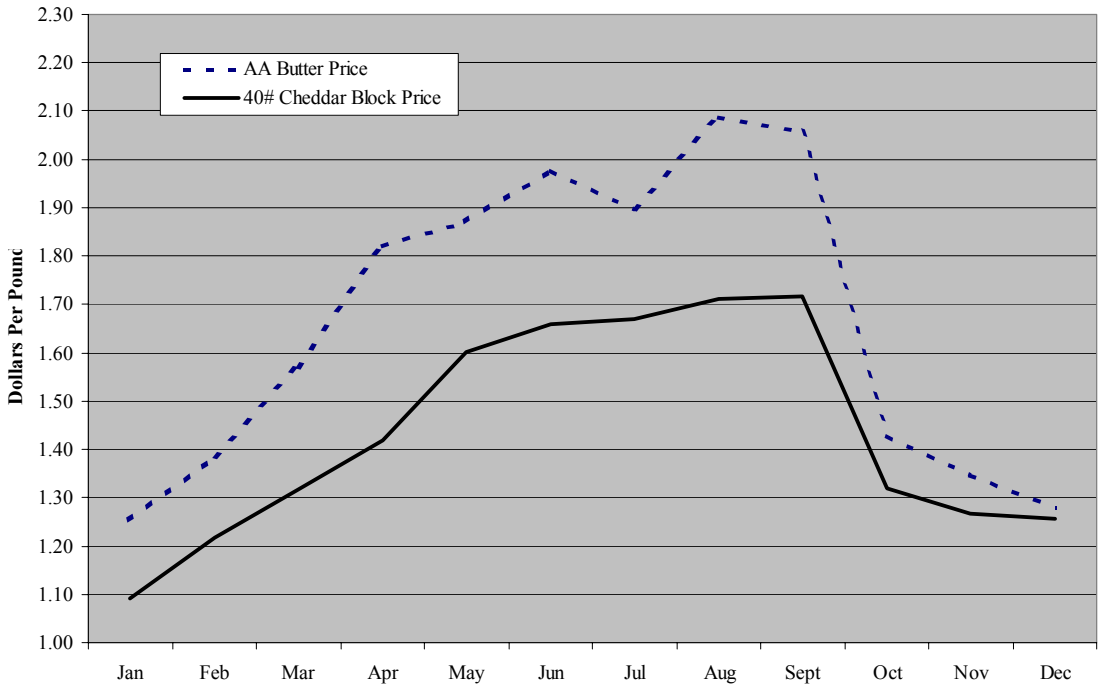
Month	*Class III Price*	
	2000	*2001*
Jan	10.05	9.99
Feb	9.54	10.27
Mar	9.54	11.42
Apr	9.41	12.06
May	9.37	13.83
Jun	9.46	15.02
Jul	10.66	15.46
Aug	10.13	15.55
Sept	10.76	15.90
Oct	10.02	14.60
Nov	8.57	11.31
Dec	9.37	11.80
Average Class III Price	9.74	13.10
Average All Milk Price	11.70	15.00*

*Estimated

The events of September 11 weakened consumer confidence in an already-weakening economy. About 60 percent of the market for cheese and butter is restaurants and food service. People are traveling less since September 11 and eating out less. This has negatively impacted dairy product and meat product sales. Latest commercial disappearance numbers show only a 0.4 percent growth over last year from January through September. This has caused wholesalers who purchase, carry stocks of and move dairy products into the consumption channel to become more pessimistic regarding future sales. They have become less aggressive in dairy product purchases and less willing to risk carrying stocks at relatively high prices.

This market pessimism has resulted in a major decline in both wholesale cheese and butter prices. On the Chicago Mercantile Exchange (CME), 40 pound block cheddar peaked at $1.78 per pound and cheddar barrels at $1.68 per pound in late August. CME cheese prices held strong through the end of September with blocks at $1.70 per pound and barrels at $1.64. But prices broke sharply in early October and by month end, the block price had fallen to $1.16 per pound and barrels to $1.135 per pound. By mid-November, prices had recovered some. CME butter prices, which were at $2.225 per pound at the end of August, declined to $1.25 per pound by late October.

CME Monthly Butter and Cheese Prices, 2001



It appears that wholesalers may have over reacted and that some further strengthening in dairy product purchasing and milk prices can be expected. In fact, by early January cheddar block and barrel prices had both recovered to $1.255 per pound. Butter prices were back to $1.35 per pound. Thus, the December Class III price, at $11.80, was higher than for November. And with much stronger prices for most of the year, the average Class III price for 2001 averaged $13.10 per hundredweight. The average all milk price for Wisconsin will average about $15.00 per hundredweight, about $3.30 higher than the depressed prices of 2000 and the second highest average milk price on record.

What can we expect for 2002?

The probability that farm level milk prices in 2001 will average less than 2001 is greater than averaging higher. History tells us that neither relatively high nor relatively depressed prices last for long periods of time because farmers do respond to price. But while expecting prices to be lower during 2002, we are not anticipating the severely depressed prices of 2000. In fact prices are likely to stay near or above recent 5-year averages. Let's consider the major factors that will drive milk prices in 2002.

On the production side, milk cow numbers will continue to decline during 2002, but at a slower rate than for 2001. A decline less than 1 percent seems reasonable. The improved milk prices

experienced in 2001may encourage some expansion but not enough to offset continued exiting of producers from dairying.

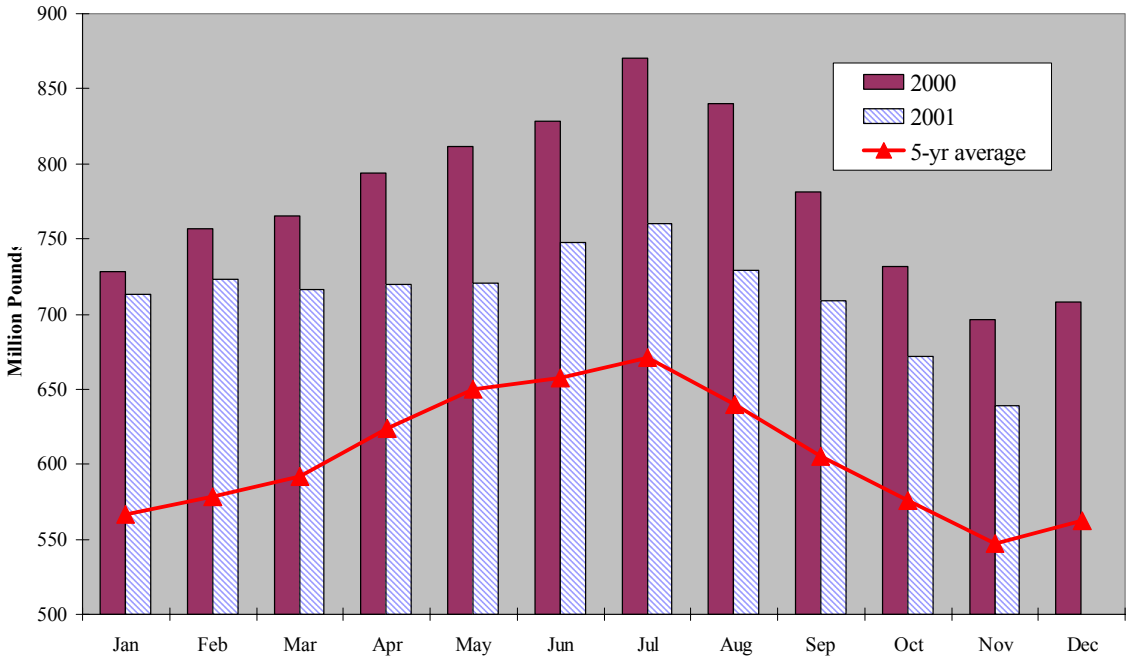
The supply of dairy replacements for expansion will remain tight and prices high. July 1, 2001 U.S. cattle inventory report showed dairy replacements down 3 percent from a year earlier and only 39.3 per 100 milk cows. A ratio of more than 40 per 100 milk cows is considered necessary to maintain herd numbers under normal culling rates.

Milk per cow will likely improve as we progress through 2002. While milk prices will be lower, relatively low grain and concentrate prices will maintain a favorable milk-feed-price ratio, encouraging farmers to feed for good milk production. As already noted, lower forage quality will slow increases in milk per cow until summer when the new supply of forages will be harvested. With milk per cow actually down slightly in 2001, an increase near 2 percent seems reasonable for 2002. Predicted cow numbers and milk per cow suggest a 2002 increase in total milk production over 2001 in the range of 1 percent to 1.5 percent.

Commercial disappearance in 2002 is likely to grow at a slower pace than during the past three years. While the demand side is subject to considerable uncertainty, we know that consumers like to eat and are in the habit of eating out. A growth in commercial disappearance between 1.5 percent and 1.75 percent now seems reasonable. Cheese prices determine the Class III price. Since about 90 percent of Wisconsin's milk is used for cheese, what happens to cheese prices bears heavily upon what the state's farmers will receive for milk prices in 2002. Cheese production and the stocks of cheese heavily influence the Class III price. With no growth in milk production during 2001 and a relatively slow growth in 2002, and assuming cheese sales will still grow 2 percent to 2.5 percent, cheese stocks will remain in better balance with consumption. From January through October, production of all cheeses was down 1.1 percent from a year ago. Cheese stocks, compared to the 5-year average, were high during 2000, but have improved considerably during 2001 and should be even more in balance with needs in 2002. November 30 stocks of natural cheeses were 8.1 percent below a year ago.

Butter prices affect what Wisconsin dairy farmers get paid for the butterfat component in milk. But under existing component pricing formulas, there is a $0.04 per hundredweight decrease in the Class III price for every $0.10 per pound increase in the butter price, assuming no change in the cheese price. The U.S. Secretary of Agriculture has proposed a change in the Class III protein price formula that would eliminate the negative impact of butter prices. In fact, the change would increase the Class III price over current formula values for the same butter and cheese prices.

U.S. Stocks of Natural Cheese



In summary, there is a greater probability for milk prices to average lower rather than higher in 2002 compared to 2001. Nevertheless, the combination of slower growth in milk production and continued growth in commercial disappearance of milk and dairy products should still yield relatively favorable milk prices.

In fact, the Class III price is likely to be higher early in 2002 than November and December 2001 prices as cheese prices continue to improve. The Class III price should stay well above $11.00 per hundredweight and perhaps peak around $13.00 in September. For the year, under these assumption, the Class III price would average near $12.10 per hundredweight and the average all milk price near $14.00 per hundredweight.

As indicated in the background information, we know that actual milk prices can turn out quite different than what are predicted. For example, if very wet weather hits California this winter affecting herd health, or very hot and humid conditions develop this summer, actual milk prices will turn out higher than shown above. Ideal weather and growing conditions next year along with a slower consumption growth than anticipated could produce lower prices. But, with the information now available, these predictions for milk prices are reasonable. Dairy farmers need to follow market conditions – milk production, cheese stocks, crop conditions, commercial disappearance and other information to determine the probability that milk prices will strengthen or weaken. And then with this information, along with a written marketing plan, decide on a milk price

risk strategy – hedging in futures, using options, cash forward contracting, or remaining open – on their future milk production. Milk price uncertainty and volatility will be the norm under existing federal dairy policy. Therefore, dairy farmers need to use available tools to manage this price risk.

Wisconsin Farm Level Milk Prices, 2001 and Projected 2002
(Dollars Per Hundredweight)

	Class III Price	
Month	***Actual 2001***	***Projected 2002***
Jan	9.99	11.60
Feb	10.27	11.70
Mar	11.42	11.60
Apr	12.06	11.50
May	13.83	11.70
Jun	15.02	12.10
Jul	15.46	12.50
Aug	15.55	12.70
Sept	15.90	13.00
Oct	14.60	12.60
Nov	11.31	12.40
Dec	11.80	11.90
Average Class III Price	13.10	12.10
Average All Milk Price	15.00*	14.00

* Estimated

Livestock and Poultry

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2001 In Review

Three unusual and unexpected events during 2001 led to greater than usual volatility in livestock and meat prices. First, a long and very harsh winter in the cattle feeding areas of the Southern Great Plains adversely affected the number and average weight of cattle marketed during the latter months of 2000 and the first several months of 2001. Total beef output during the first quarter of 2001 was down more than 7 percent from the year earlier. This was the second largest year-over-year reduction in quarterly beef output in more than 21 years. The decline in beef output during the first quarter occurred despite an increase of more than

6 percent in the slaughter of dairy and beef cows.

Because production of all meats and poultry except beef was down 0.4 percent during the first quarter, total meat output fell more than 2.5 percent from the preceding year, also the second largest year-over-year decline for any quarter in more than 21 years. This very short meat supply contrasted with robust demand (U.S. employment and consumer income both set record highs in January 2001), leading to very strong livestock and meat prices early in 2001.

Second, with cattle and beef prices high early in 2001, the meat industry faced unexpected and seemingly constant news of possible outbreaks of BSE (bovine spongiform encephalopathy) and foot and mouth disease in several countries, with particularly serious consequences in England. This yielded mixed results, with severe demand problems for beef worldwide and likely some favorable impact on the demand for pork and poultry.

With severe impacts on demand and the onset of warmer spring temperatures in the cattle feeding areas in the Great Plains, choice cattle prices declined from their March high of $79.44 to $69.07 by August.

Third, the tragic terrorist events of September 11 negatively affected many sectors of the already weakening U.S. economy. With airline travel down, food service sales, especially of beef, suffered. Employment and consumer income continued lower, further weakening meat demand. Thus, meat and livestock prices, which began 2001 on a high and rising note, ended the year in a much less favorable economic environment.

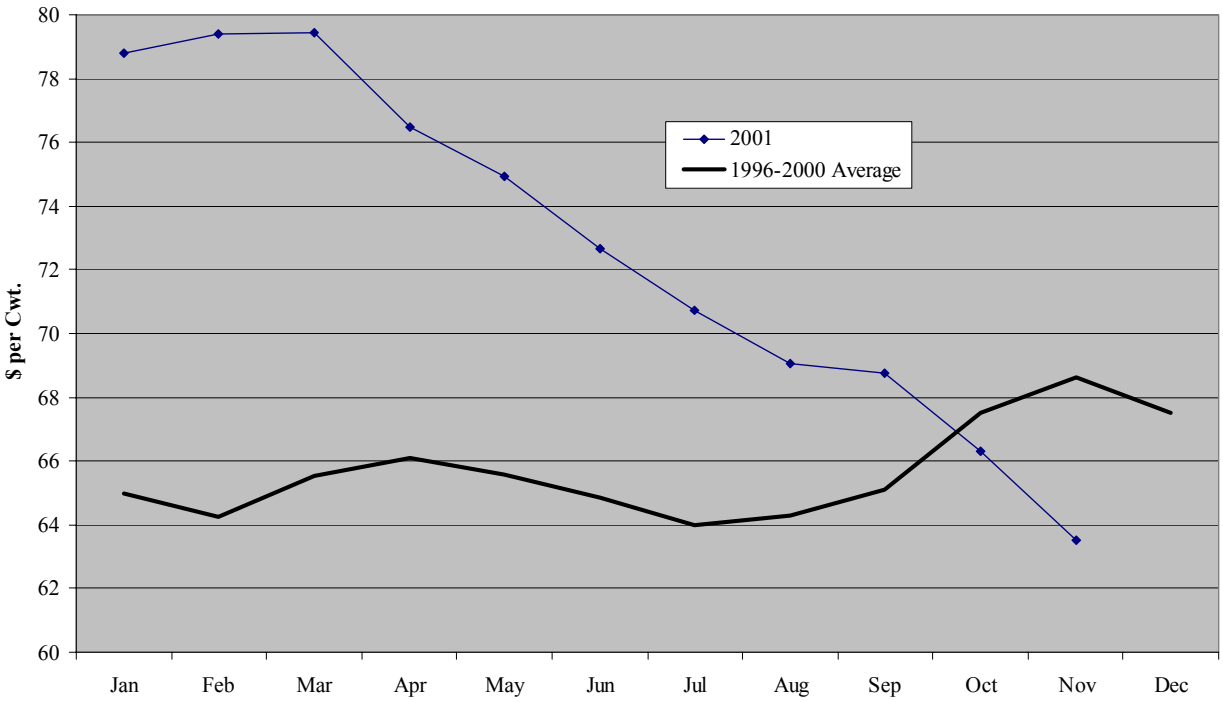
The events early in the year appeared to have had less impact on the demand for poultry meat. However, following events of September 11, the wholesale price of bone-in chicken breast meat fell from over $76 in early September to under $56 by late November. Boneless turkey breast meat fell from $187 in early September to $145 in late November in the wholesale market.

Meat Output Nearly Steady in 2001

When the final numbers are tallied, meat production in 2001 will be very close to the total for 2000. With the help of one additional weekday in 2001, total meat output may have avoided its first annual decline in 19 years.

Beef production was down about 3 percent, the largest annual drop in 22 years. Pork production was up about 1 percent, despite a small decline in the number of hogs slaughtered. Thus, pork production avoided its first back-to-back annual output declines since 1981 and 1982. Broiler meat production was up about 2 percent, its second smallest percentage increase since 1982. Turkey output was up about 3 percent.

Monthly Choice Cattle Prices



Meat Production Steady to Up Slightly in 2002

After rising rapidly by an average of 3.1 percent per year during the nine years from 1990 to 1999, meat production increases leveled off during the last two years with an average increase of about 0.5 percent per year. Only a small increase in meat output is likely again in 2002. The average weights of cattle, hogs, broilers and turkey continue their long term increases but the number of animals and birds slaughtered has stagnated during the past two years despite an abundance of relatively low-priced corn, soybean meal and other feed inputs. The slower growth of meat exports in the late 1990's and very low prices of hogs in 1998 and 1999 and of broilers in 1999 and 2000 have slowed the two-decade trend of rising production.

Beef Production Likely Down Slightly in 2002

After rising more than 18 percent from its cyclical low in 1990 to 2000, beef output fell more than 3 percent in 2001. A further, but likely smaller decline is expected in 2002.

The number of cattle and calves on U.S. farms and ranches reached its most recent cyclical peak at 103.5 million head in 1996. It declined to 97.3 million head in 2001 and appears to be leveling off. The cattle slaughter cycle normally follows the cattle numbers cycle by two or three years. Thus, the number of cattle slaughtered and the amount of beef produced in 2002 should decline again, but by less than the 3 percent drop witnessed in 2001.

Choice Cattle Prices to Follow a Different Seasonal Pattern in 2002

Choice cattle prices were very strong early in 2001, averaging $79.21 for the first quarter. However, rising retail beef prices, a slowing domestic economy, increasing beef production as the severe weather disappeared with the coming of spring and summer all contributed to declining choice cattle prices. They fell to an average of $74.69 in the second quarter and to $69.51 in the third quarter. After the events of September 11, choice cattle plummeted further to a November low. Choice cattle prices declined for eight consecutive months from March to November, exceeding any such string of monthly declines in the last 25 years.

The average price of choice cattle in 2001 was about $2 per live cwt. higher than the averages for both 2000 and 1999 and the highest in eight years. Prices in 2002 are expected to average a little lower than in 2001, but with a much different seasonal pattern: prices will be much lower than in 2001 during the first quarter and higher than in 2001 late in the year.

Cow Slaughter and Prices Up in 2001, Steady in 2002

Cow slaughter was up more than 4 percent in 2001 following a four-year decline. All of the increase in cow slaughter was attributed to an increase of about 9 percent in beef cow slaughter while dairy cow slaughter about matched 2000 totals. Dry weather in many of the leading beef cow producing states for much of the year led to the larger slaughter of beef cows.

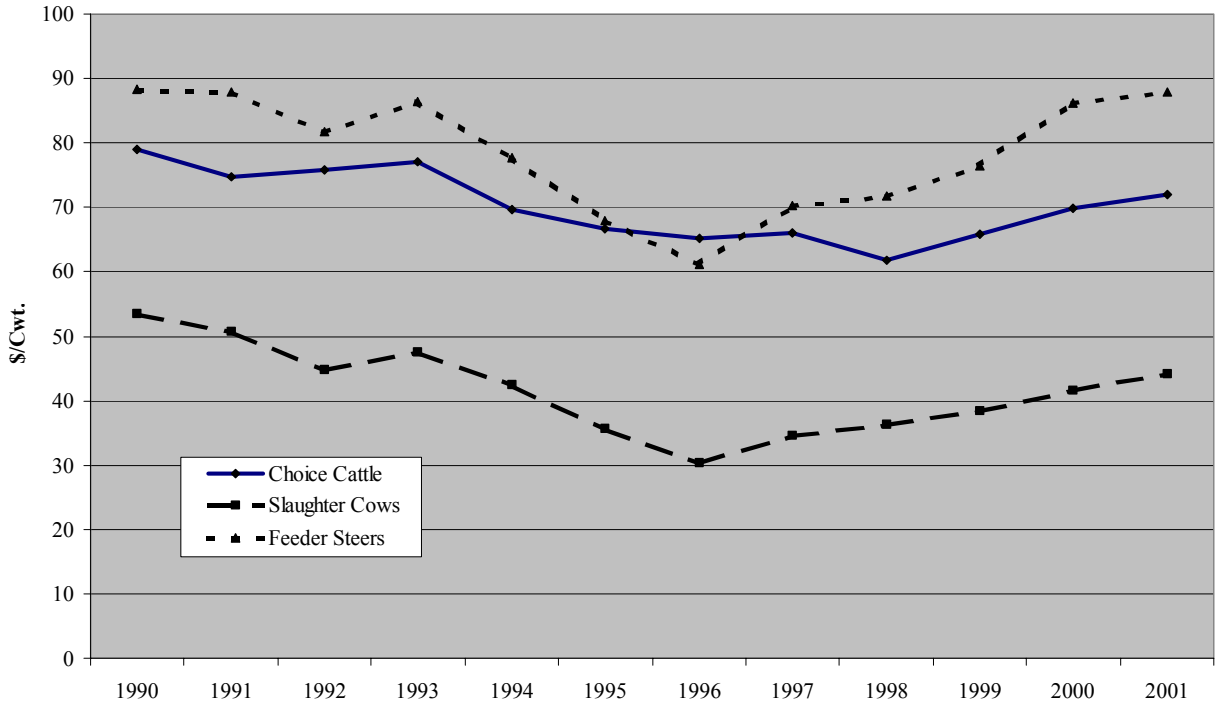
Total cow slaughter numbers in 2002 should be near those of 2001. Cow prices (boning utility, Sioux Falls) have risen for five consecutive years from an average of $40.33 in 1996 to about $46.00 in 2001, the highest level in eight years. Average prices in 2002 should be near those in 2001.

Feeder Cattle Prices Likely a Little Lower in 2002

Feeder cattle prices were very strong for the first three quarters of 2001 before being hit hard by the demand consequences of the September 11 terrorist attacks. Prices of feeder cattle (750-800 lb. steers, Oklahoma City) averaged $89.14 for the first three quarters, exceeded the previous record annual high of $88.27 reached in 1990. Prices had risen 41 percent in four years, from a cyclical low of $61.08 in 1996 to $86.17 in 2000.

Feeder cattle prices should average a little lower in 2002 as demand for beef tries to recover from the difficulties of late 2001. Feeder cattle prices in recent years have been supported somewhat by weak feed prices, which allow feed lot managers to bid more of the expected finished animal price into the feeder cattle. This positive factor should continue at least through the first half of 2002.

Average Annual Cattle Prices



Pork Production Up Slightly in 2002

A 10 percent increase in pork production in 1998, the largest annual increase in 19 years, brought record low real hog prices late in that year. Since then, pork output has been relatively flat. Pork production in 2001 was up 0.5 percent from 1998 despite a 3 percent decrease in the number of hogs slaughtered. A continued increase in the average weight of hogs slaughtered and in the proportion of meat produced within the hog carcass has allowed more pork to be produced per hog. For example, the number of hogs slaughtered in 2001 was only 1.6 percent larger than the number slaughtered in 1980, but total pork production was up more than 16 percent.

The most recent USDA quarterly survey of hog producers reported that the number of hogs kept for market and the number kept for breeding are about equal to those of one year earlier. On September 1, producers also indicated that they intended to increase this winter's farrowings (December-February) by 3 percent. The USDA's November 1 survey reports that the number of pigs saved during October rose above year-earlier numbers for the first time in 2001 and that the number of sows bred in September and October rose slightly from 2000. It appears that 2002 hog slaughter will be 1 percent to 3 percent above 2001 with most of the increase coming later in the year. However, the rapid hog price decline in 2001 from over $52 in August to under $36 in November may negate some expansion plans.

The long decline in hog production in Wisconsin, which has spanned several decades, may have ended recently. In 2000, there were 124,000 sow farrowings in Wisconsin, down 10 percent from 1999 and only 1.1 percent of the U.S. total. Recent quarterly surveys show that sow farrowings in Wisconsin were up 10 percent in the spring (March-May) and up 13 percent in the summer (June-August) of 2001.

Hog Prices Likely to Average a Little Lower in 2002

Hog prices suffered a larger-than-normal autumn decline in 2001 but still recorded a slight annual increase of about a dollar per hundredweight over the 2000 average of $44.70. The 2001 average price was the highest in four years. Hog prices are likely to average a bit lower in 2002 – in the low 40's – but exhibit less volatility than experienced in 2001 when they rose from a January average of $38.61 to a June high of $54.53 before falling to below $36.00 in November.

Broiler Output Continues Slow Rise

Broiler production achieved another record high in 2001, the 27th consecutive new annual high. However, 2001's 2 percent increase was well below the 5.4 percent average annual increase during the preceding 17 years. The long and rapid increase in broiler production over the last five decades has produced a huge industry where past percentage output increases are not likely. Continued good domestic demand, export growth and relatively low feed prices have allowed the industry to expand modestly during the last two years and another 2 percent to 3 percent gain is likely in 2002.

Wholesale broiler prices in 2001 averaged about 5 percent above those of a year earlier. The 12-city composite wholesale price average of about $59 per cwt. was in the middle of the $56-$63 range of annual averages for the five years of 1996-2000. The average price in 2002 should be near or slightly below that of 2001 and allow the industry to continue its slowing expansion.

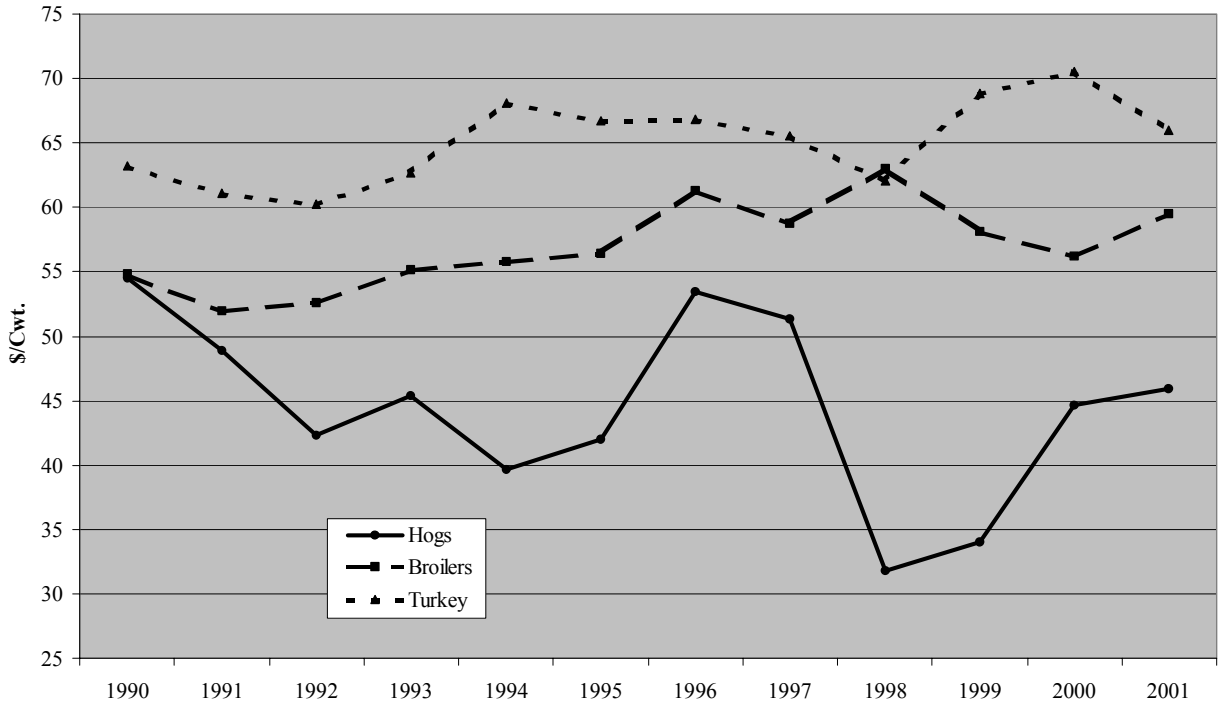
Turkey Production Also Slowly Rising

Turkey production was up 3 percent and set a new record high in 2001, easing past the old record set four years earlier. This sidewise trend in turkey output is a considerable change from earlier years when production set record highs for 15 consecutive years from 1983 through 1997. However, output outran demand, prices fell, frozen inventories rose to record and burdensome levels and the relatively high feed prices in 1995 and 1996 resulted in severe financial setbacks causing the industry to reduce output for a time.

A modest 2 percent to 3 percent increase in production to a new record high is likely again in 2002. The increased turkey output in recent years comes mostly from an increase in the average weight of turkeys slaughtered – up 10 percent in the last four years and 75 percent since 1960.

Turkey prices were mixed in 2001. Whole bird prices averaged lower but thigh meat and some minor cuts brought higher prices. Average prices in 2002 should be near or a little below those of 2001.

Average Annual Prices, Hogs and Poultry



Exports Up for Pork, Poultry; Down for Beef

The meat export picture was mixed in 2001. Pork exports were up about 18 percent while pork imports were down slightly. This resulted in net exports of 3.1 percent of domestic pork production, the highest in many decades. Pork exports have exceeded imports for the last seven years following decades of net pork imports, which reached a high of 7.6 percent of domestic pork output in 1987.

Record broiler exports of nearly 6.2 billion pounds in 2001 accounted for a record high of 20 percent of domestic production. Broiler exports just 12 years ago of 0.8 billion pounds represented only 5 percent of U.S. production in 1989.

Turkey exports of a half-billion pounds in 2001 represented a 10 percent annual increase and were second highest on record, exceeded only in 1997. A little more than 9 percent of domestic turkey output was exported, with Mexico by far the most important destination.

Beef exports were down about 13 percent in 2001 while imports, mostly from Australia, New Zealand and Canada, rose about 4 percent. Reduced exports to Japan and South Korea represented most of the decline. Worries over foot-and-mouth disease and BSE hurt beef demand in important foreign markets and contributed to the decline. Net beef imports over exports in 2001 amounted to 3.6 percent of domestic beef production, the largest in eight years. Net imports of beef peaked at 10.5 percent of domestic beef output in 1979, then fell to a low of 0.8 percent in

1996 and 1997 before rising again in recent years.

Food safety concerns and a world wide recession will likely continue to hurt beef export demand as we enter 2002. However, lower beef prices and an expected turnaround in the world business cycle may improve the situation later in the year. Export demand for pork and poultry should be near 2001 levels.

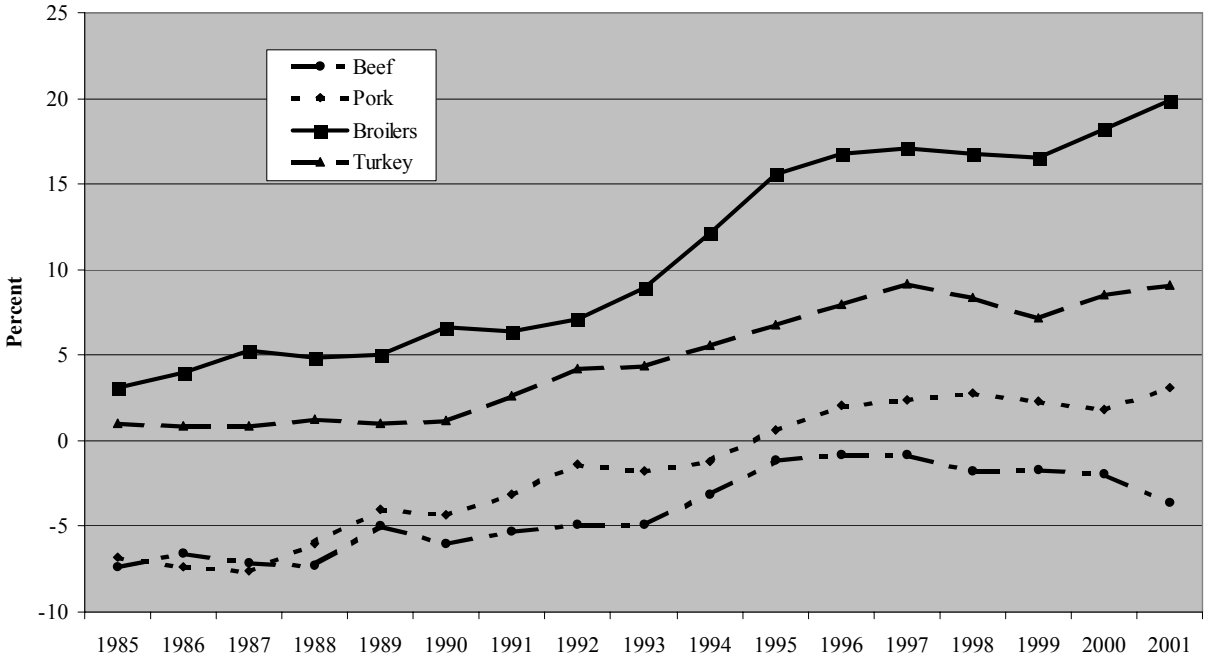
Egg Production Slowly Rising; Prices Steady

Egg output rose about 2 percent in 2000 and in 2001 and should rise by a similar amount in 2002. Egg prices jumped in the mid-1990's when feed prices were relatively high but have fallen back. The average per-dozen price has been in the upper-60-cents range during the past several years. Prices are expected to continue to move sidewise in 2002.

Per Capita Meat Consumption In Slow Decline

Per capita meat consumption in the U.S. slipped about 1 percent to 217.2 pounds in 2001 following a small decline in 2000 from the record high of 220.3 pounds in 1999. A drop of less than 1 percent is expected in 2002. Per capita broiler and turkey consumption should be up about 1 percent, beef consumption down about 1 percent and pork consumption about the same as in 2001.

Annual Net Foreign Trade of Livestock Products as a Percent of Production



Should per capita consumption drop in 2002, it would mark the third consecutive year of decline. Since 1960, that has happened only once, from 1994 to 1997 when a drop of about 2 percent was caused by rapidly rising corn and soybean prices and rapidly rising meat exports, which reduced the available supply for domestic markets.

Nearly all of the increase in meat consumption per person in the last three decades has been due to the continued rise in broiler consumption, which set a record of 77 pounds in 1999 and has trended sidewise during the last two years. Consumption of the higher-valued chicken breast meat has continued to rise slowly while the export market has taken more of the lesser-valued parts. Per capita broiler consumption has more than doubled since 1975.

Beef consumption per capita peaked at 94.4 pounds in 1976 and has been in a narrow range of 65 to 70 pounds for the last 13 years. Pork consumption per person has also trended sidewise between 48 and 54 pounds for the last 20 years. Turkey consumption per capita has been flat since 1990, between 17.6 pounds and 18.5 pounds each year, up from 11.0 pounds in 1984 and 4.5 pounds in 1965.

Retail Meat Prices Higher in 2000 and 2001; Smaller Increase in 2002

With high employment and personal income and a small decrease in the per capita meat supply, retail meat prices rose smartly during 1999, 2000 and into early 2001. The two-year jump in average annual prices from 1999 to 2001 contrasts with the eight preceding years when retail meat price increases lagged the rise in the Consumer Price Index.

Meat prices should rise very little during 2002 from late 2001 levels. The annual average for the year 2002 will likely be up somewhat since retail prices were still rising rapidly early in 2001.

Annual Average Percentage Change:
Retail Meat Prices and Consumer Price Index

	1987-91	*1991-99*	*1999-2001(p)*
Beef and Veal	6.1	0.6	7.7
Fresh Pork	3.9	1.1	5.6
Poultry	4.2	2.5	2.3
Red Meat	5.2	0.9	6.0
CPI (U)	5.0	2.8	3.3

P = preliminary

Corn and Soybeans

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Introduction

U.S. corn and soybean markets continue to be influenced by good-to-excellent production. There has been a tendency to blame the 1996 Farm Bill (often referred to as "Freedom to Farm") for the low grain prices in recent years. However, both corn and soybean yields have been at or above trend levels for the last six years (see chart below). This is completely unprecedented in U.S. agricultural history, and has much more to do with price action the last few years than the 1996 Farm Bill.

Because Wisconsin grain production suffered a bit relative to year-ago levels in 2001, the State's contribution to the national corn crop was smaller than in the last couple of years. However, despite reduced year-over-year soybean yields in Wisconsin, the state's total contribution to the U.S. crop increased because more acres were planted to soybeans. As a result, local corn prices improved relative to the national average, but local soybean prices are not performing any better this year than in years previous.

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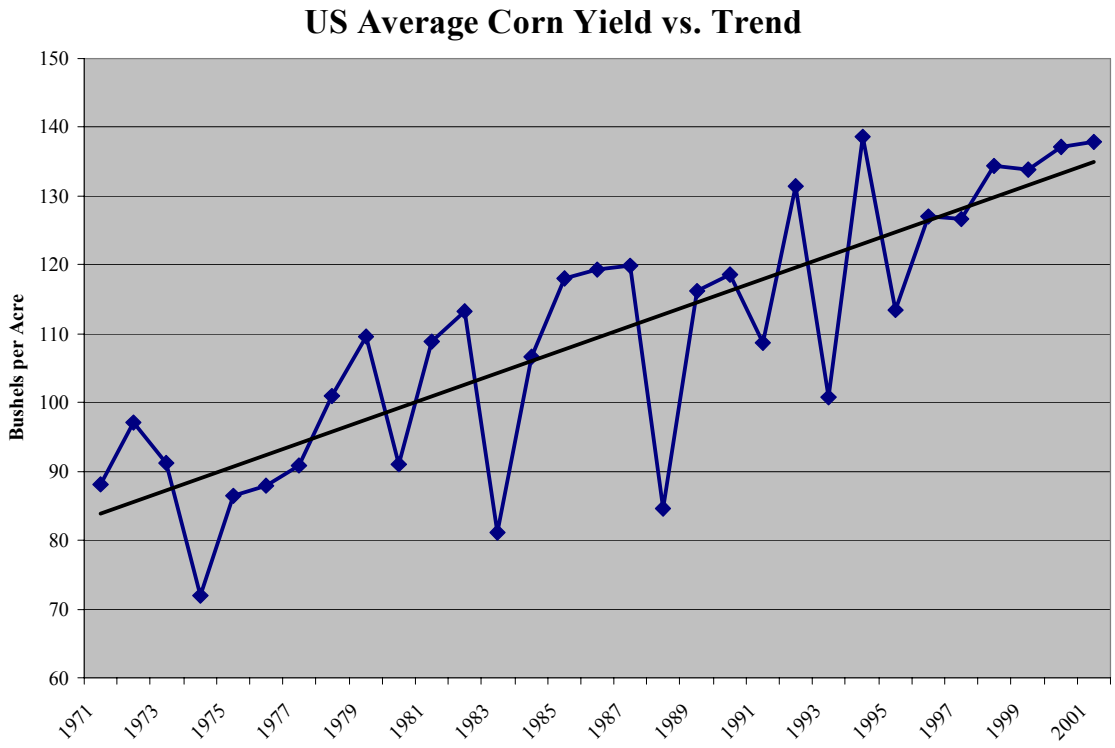


Corn

Based on the USDA estimate as of December 2001, the 2001 U.S. corn crop totaled 9.55 billion bushels. This was significantly smaller than the 2000 U.S. corn crop, but larger than 1999 production. The reduction in total corn produced relative to a year ago happened because fewer acres were planted to corn. In fact, of the 33 states for which USDA reports corn production, only four increased acres relative to 2000. The only corn producer of any size to increase corn acreage was Indiana.

USDA Reported U.S. Corn Balance Sheet, September-August Crop Year

Marketing Year	*96/97*	*97/98*	*98/99*	*99/00*	*December Estimate 00/01*	*December Forecast 01/02*
			Million bushels except as noted			
Beginning Stocks	426	883	1,308	1,787	1,718	1,899
Imports	13	9	19	15	7	10
Acres Planted (Mil.)	79.2	79.5	80.2	77.4	79.5	76.0
Acres Harv. (Mil.)	72.6	72.7	72.6	70.5	72.7	69.2
% Harvested	91.7%	91.4%	90.5%	91.1%	91.4%	91.1%
Yield (Bu/Acre)	127.2	126.6	134.4	133.8	137.1	136.3
Production	9,233	9,207	9,759	9,431	9,968	9,546
Total Supply	9,672	10,099	11,085	11,232	11,693	11,454
Feed & residual	5,302	5,505	5,496	5,664	5,890	5,800
Food/Seed/Indus.	1,692	1,782	1,822	1,913	1,967	2,030
Exports	1,795	1,504	1,981	1,937	1,937	2,050
Total Demand	8,789	8,791	9,298	9,515	9,794	9,880
Ending Stocks	883	1,308	1,787	1,717	1,899	1,574
Stocks To Use	10.04%	14.88%	19.22%	18.05%	19.39%	15.93%
Avg. Farm Price,	$2.71	$2.43	$1.94	$1.82	$1.85	$2.00

Yields in some corn producing states were up in 2001, and the national average yield represents the second highest corn yield on record (surpassed only in 1994, which coincides with the last record U.S. crop). Despite an increase in national average yields, however, half of the corn producing states suffered yield declines relative to a year ago. Some of the biggest yield declines were reported in the Upper Midwest states.

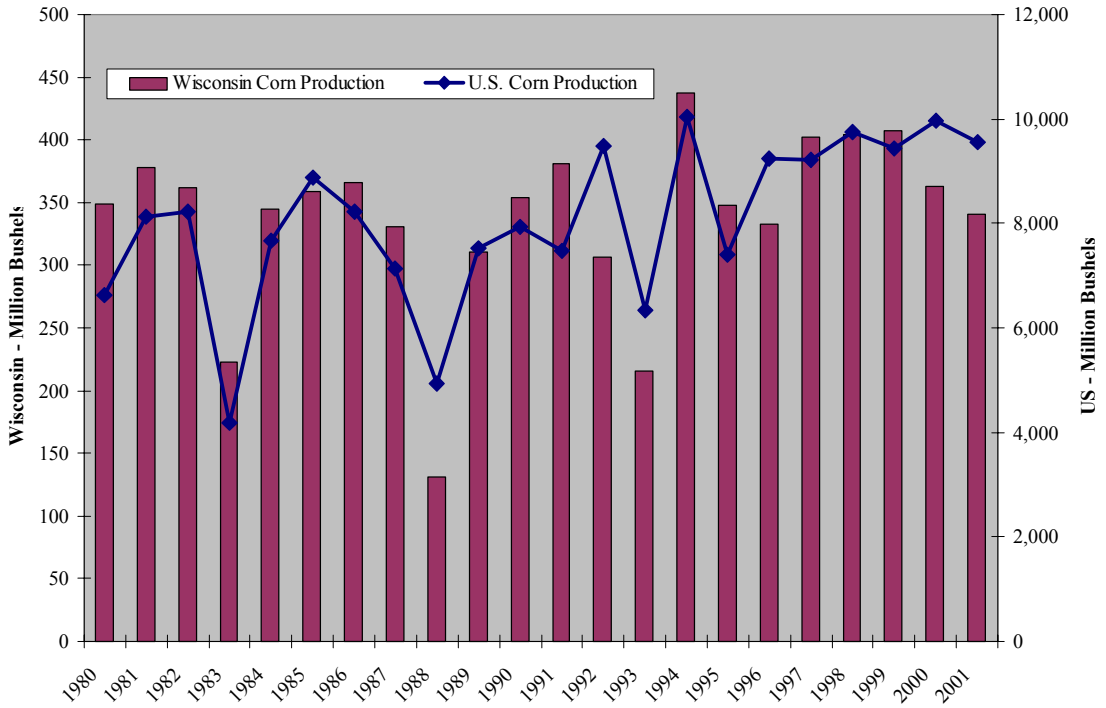
Wisconsin corn production totaled 341 million bushels in 2001 (November estimate), down more than 6 percent from 2000 and more than 15 percent from 1999. Thanks to a reduction in Wisconsin's relative contribution to the total U.S. crop, basis levels (the difference between local price and corn futures prices) were much stronger at harvest when compared to the past couple of years. However, stronger basis levels at harvest results in lower expected profits from storage. As such, it's unlikely that the 2001/02 marketing year will yield significant returns to storage unless the futures market can rally prices into the spring.

The smaller Wisconsin crop in 2001 resulted from both reduced acres and a reduction in average yield. The state's 2001 corn acres totaled 2.6 million, down 5.5 percent from last year's 2.75 million acres, which in turn were down over 3 percent from 1999. This trend is being driven largely by a price environment in which producers are often selling into the cash market at or below loan rate levels. Since soybeans have a much more attractive loan rate than corn, in a low price environment the loan program encourages farmers to shift corn ground into soybean production. The price impact of this shift has been exacerbated by lower Wisconsin corn yields each of the past two years. In 1999, the average Wisconsin corn yield was 143 bushels per acre. In 2000 Wisconsin corn averaged 132 bushels per acre, and this past year 131 bushels per acre.

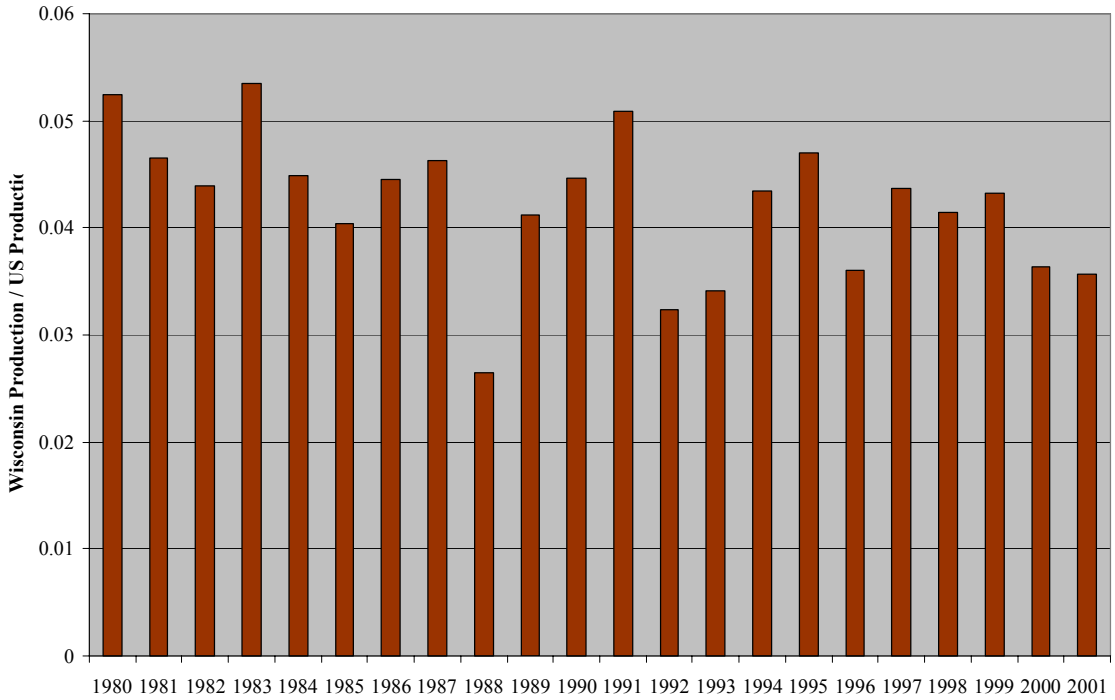
Average price levels for corn, both nationally and in Wisconsin, have drifted lower in recent years. There is some positive news, however. Ending stocks in 2001/02 are expected to be at their lowest level since 1997/98. As long as the farm program continues to encourage shifts out of corn and into soybeans, corn prices are likely to improve. Note from the chart below that the average corn price the last few years has been well below the average the first half of the 1990's. If producers continue to shift acres from corn to soybeans, ending stocks of corn will continue to shrink and average corn prices will begin to move back to levels experienced 7 or 8 years ago.

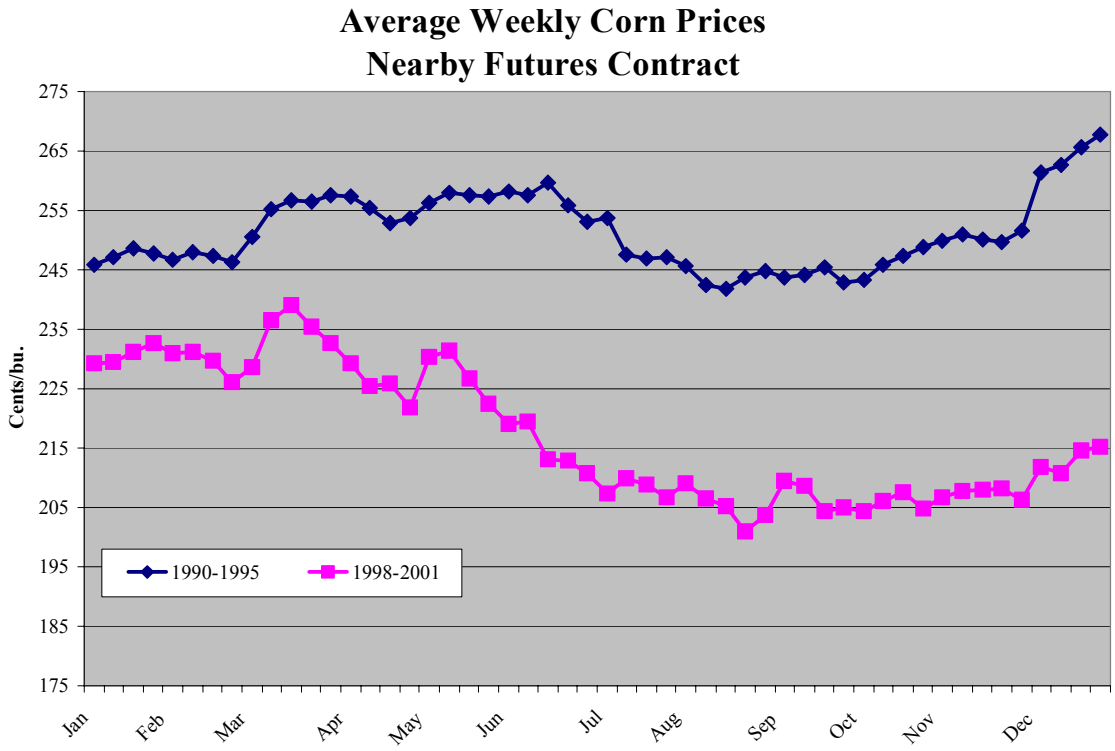
End-of-the-year stocks, known as carryout, represent the market's cushion against a crop production problem in the next harvest. Carryout has a direct influence on both the average price level through the current marketing year, and prices offered for delivery commitments following the next harvest. In general, the larger the expected carryout, the lower the average price during the marketing year and the lower the pre-harvest price offerings for the next harvested crop.

Corn Production



Wisconsin's Relative Corn Share





Given the current market environment, it seems reasonable to expect corn acres, both nationally and in Wisconsin, to decline in 2002. If this happens, forward-pricing opportunities will be enhanced relative to last year. If acres are reduced another 1 million to 1.5 million, December futures prices could trade back above the $2.65-per-bushel area, and well beyond if there are any concerns about the general crop condition once planting is over. However, a key element in this scenario is maintaining the excellent demand prospects for the corn market currently anticipated by USDA. USDA expects very strong demand for both industrial use and exports relative to use levels in recent years. Should the market begin to question the likelihood of achieving those demand projections, prices could respond negatively even with smaller acreage projections for next year.

Soybeans

During 2001 we continued to see aggressive increases in soybean acres nationally, as well as in Wisconsin. Since 1990, U.S. soybean acres have increased more than 30 percent, with a significant amount of the growth taking place in Northern states. While soybean acreage has increased in all but one of the last twelve years, the pace of growth has accelerated since the 1996 farm bill went into effect. As noted above, this is driven by the relative attractiveness of the soybean loan rate compared to the loan rates for corn and wheat. The current loan program, and associated loan deficiency payments (LDP), highly favors soybean production over corn, and both spring and winter wheat. As a result, some of the most dramatic increases in soybean acreage have come from acres formerly devoted to wheat

production. North Dakota growers alone increased 2000 soybean acres about 50 percent relative to 1999, and then increased them another 21 percent in 2001.

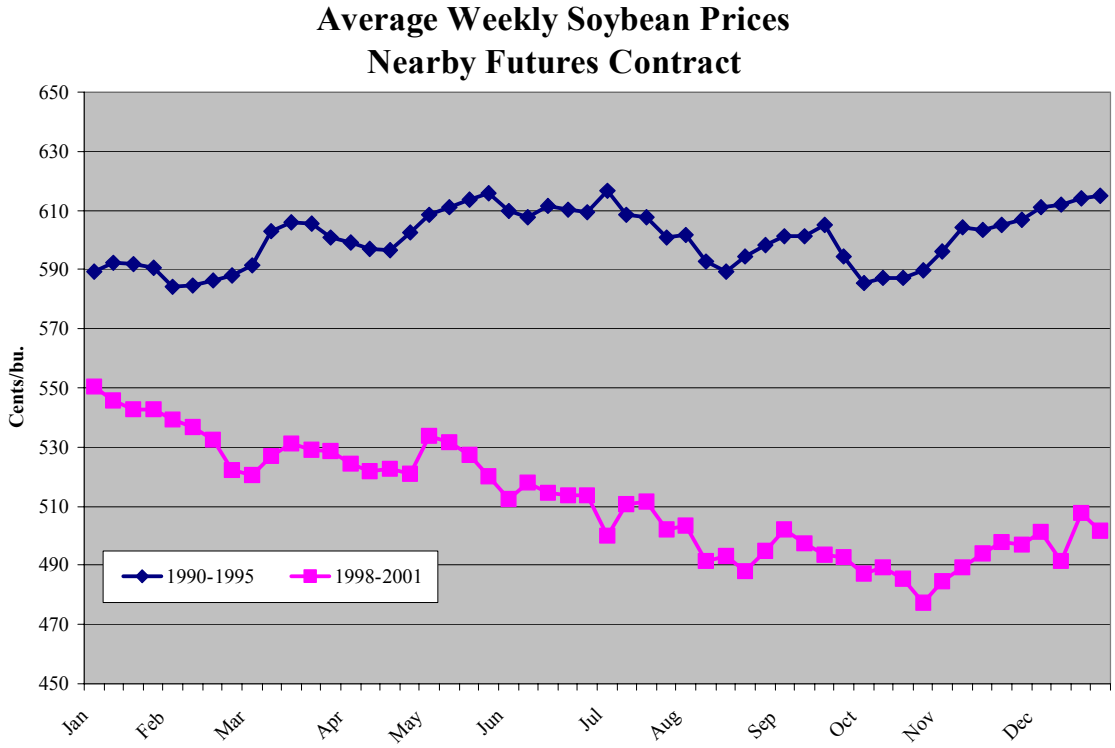
Wisconsin soybean acres have also increased faster than the national average. In 1990, Wisconsin growers planted less than one-half million acres of soybeans. By 1997, over 1 million acres were planted. Since 1997, acres have increased between 150 thousand and 200 thousand every year, bringing the state's total soybean acreage in 2001 to 1.7 million. A negative result of this growth is that, unlike corn, Wisconsin's relative share of U.S. soybean production is growing, which puts downward pressure on basis levels at harvest. Further, despite weak basis levels at harvest, storage has not been profitable the last couple of years because of growth in the South American production, and expectations for yet more U.S. acres in the following production season.

The following table shows the overall balance sheet for soybeans in the 2001/02 marketing year. Despite soybean use being up 1.5 percent from 2000/01, 2002 ending stocks are expected to be 330 million bushels, an increase of more than 33 percent over last year. This will present a formidable obstacle to any favorable price action as we move into the spring and summer. Unless carryout projections are reduced (either through unanticipated increases in demand, or a downward revision in 2001 production), we're unlikely to see any sustained price move above the national loan rate price of $5.25 per bushel. Thus, in 2002 soybean producers will once again be producing for the loan rate, with their greatest marketing challenge being deciding when to take the Loan Deficiency Payment. While there are reasons to be optimistic about the chances of corn prices returning to the average levels of several years ago, that is not the case for soybeans. U.S. and South America growers continue to plant more land to soybeans, and both continue to experience good yields. Thus, average market prices for soybeans will continue to deteriorate. The chart below shows the relationship between weekly average soybean prices the last few years relative to prices from the early and mid-1990's.

The current production environment, coupled with the farm program incentives, suggests little reason to expect a change in the overall price pattern. Producers will continue to see prices averaging well under $5 per bushel, with the most attractive market price opportunities occurring just above loan rate levels. In this environment, the only way to get a net soybean price anywhere near $6 per bushel is to forward-sell soybeans (either with a hedge or a forward cash contract) when prices are above $5.25 per bushel in the futures market, and then plan on adding an 80-cent or $1 loan deficiency payment at harvest. Storing soybeans in hopes of significant price improvement following harvest will continue to be a very risky strategy as long as South American production continues to grow.

USDA Reported U.S. Soybean Balance Sheet,
September-August Crop Year

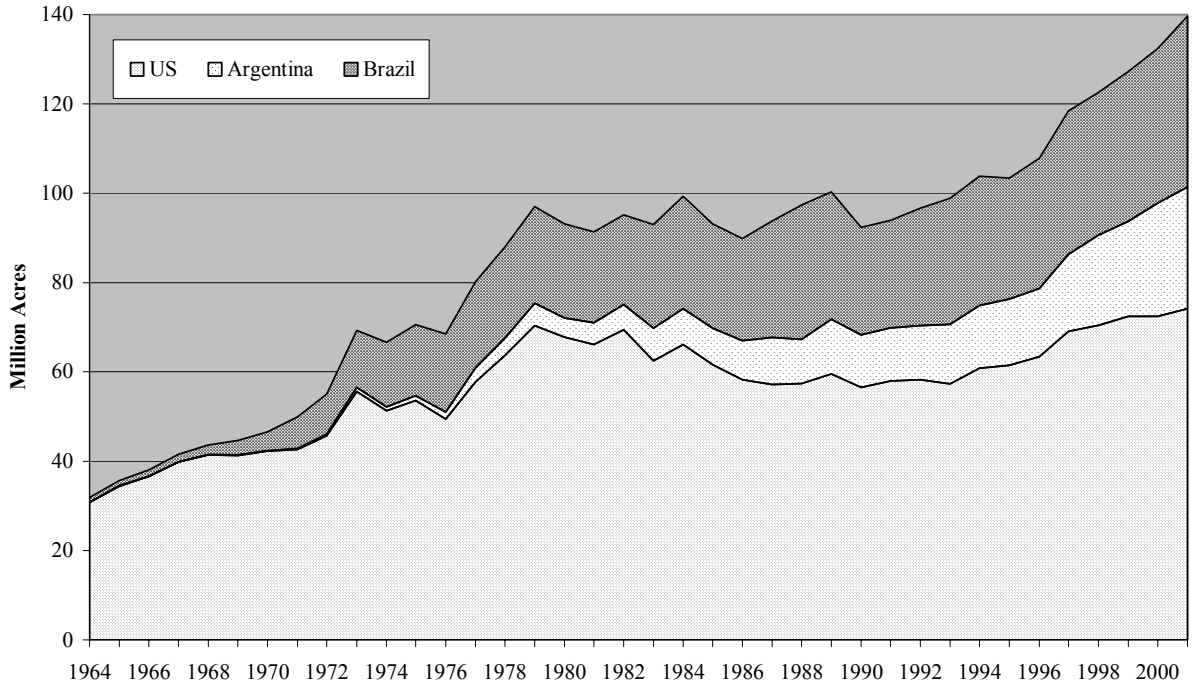
Marketing Year	*96/97*	*97/98*	*98/99*	*99/00*	*December Estimate 00/01*	*December Forecast 00/01*
			Million bushels except as noted			
Beginning Stocks	183	132	200	348	290	248
Imports	9	5	3	4	4	4
Acres Planted (Mil)	64.2	70	72	73.7	74.3	75.2
Acres Harv. (Mil)	63.3	69.1	70.4	72.4	72.4	74.1
% Harvested	98.6%	98.7%	97.8%	98.2%	97.4%	98.5%
Yield (Bu/Acre)	37.6	38.9	38.9	36.6	38.1	39.2
Production	2,380	2,689	2,741	2,654	2,758	2,923
Total Supply	2,572	2,826	2,944	3,006	3,052	3,175
Crush Sep/Aug	1,436	1,597	1,590	1,578	1,641	1,670
Exports	882	873	801	973	998	1,000
Feed/Seed/Res.	123	156	205	165	165	175
Total Demand	2,441	2,626	2,595	2,716	2,804	2,845
Ending Stocks	131	200	348	290	248	330
Stocks To Use	5.37%	7.60%	13.41%	10.68%	8.84%	11.60%
Avg. Farm Price	$7.35	$6.47	$4.93	$4.63	$4.54	$4.40



The chart below illustrates the growth in soybean acres in the United States, Argentina and Brazil. When compared to the South American countries, growth in U.S. soybean acres does not appear all that dramatic. Notice that Brazil and Argentina together account for about as many soybean acres as the United States. Twenty years ago they planted about a third of what we did, and 30 years ago production was almost non-existent. A similar story is revealed when comparing total production of the three countries. In the last 20 years, production has grown more rapidly in South America than in the United States. Total production in South America is now about equal to U.S. production.

As long as the trends of the last several years continue, it is difficult to be optimistic about future soybean prices. While it is possible the new farm bill could change the strong incentives that favor soybean production over corn and wheat domestically, early versions of the legislation do not appear headed in that direction. Further, it is likely that South America will continue to aggressively increase soybean production in the next few years, possibly overtaking the U.S. in both total land devoted to soybeans, and total production.

Acres Planted to Soybeans



Farm Inputs, Credit and Land

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Farm Inputs

At this time last year, we expected that prices of fertilizer, chemicals and feed would be up as much as 5 percent in 2001, due largely to high oil and natural gas prices. Market conditions have changed dramatically, however, and we are now looking at much lower prices for oil and natural gas. Accordingly, the prices farmers pay for fuel, fertilizer and chemicals in the coming year should be lower than what they were in 2001.

Agricultural economists at Purdue University are forecasting drops in nitrogen fertilizer prices in the range of 25 percent to 30 percent. They are also suggesting that phosphate prices will be down sharply while potash will be down 2 percent from 2001 levels.

Lower oil and natural gas prices will obviously reduce farmers' fuel costs. In addition, the decline in energy prices should result in lower to steady prices for pesticides and other petroleum-based agricultural chemicals.

Lower prices for fuel, pesticides and chemicals will help lighten farmers' financial pressures. But these lower input prices will not offset the problems stemming from low prices for corn, soybeans and other crops.

Farm Credit

In an effort to jump-start the U.S. economy in 2001, the Board of Governors of the Federal Reserve systematically cut the interest rate charged on loans to banks. These cuts in the fed funds rates have worked their way through financial markets and driven down interest rates for farm loans.

Cuts in interest rates on farm loans in the past year have been substantial. According to data published in the November 2001 issues of the *Ag Letter: The Agricultural Newsletter from the Federal Reserve Bank of Chicago*, interest rates on farm operating loans dropped from 10.17 percent to 8.01 percent between the third quarter (July-September) of 2000 and the third quarter of 2001 – a 2.16 percentage point drop. Over a year, this will save farmers $21.60 per $1000 borrowed.

The rates charged on farm real estate loans also fell, but not as much the rates for farm operating loans. The Federal Reserve Bank of Chicago reports that interest rates for farm real estate loans fell 1.71 percentage points, from 9.18 percent to 7.47 percent in the twelve-month period beginning in the third quarter of 2000. This has made real estate more affordable for farmers.

Barring a major turnaround in the U.S. economy, it is not likely that the Federal Reserve will tinker with interest rates. This is good news for farmers using credit. It means interest rates on both operating loans and real estate mortgages are likely to remain low throughout 2002. Further declines in farm interest rates are unlikely because the Federal Reserve has essentially cut rates as low as they can. Therefore, farmers should not plan on credit getting much cheaper in 2002.

The results of an agricultural banker survey conducted in October 2001 by the Federal Reserve Bank of Chicago suggest that conditions in the Midwestern farm credit markets are more favorable now than they have been in recent years. Bankers state that loan repayment has improved substantially while farmers' demands for new credit, or extensions on existing loans, are at their lowest levels since the fourth quarter of 1997. Those two findings are good news in that they suggest farmers are servicing their debts and limiting their use of credit to ensure that they do not become overextended.

Interest Rates On Farm Loans in the Seventh Federal Reserve District, July-September, Percent

Year	*Operating*	*Real Estate*
1998	9.43	8.33
1999	9.32	8.42
2000	10.17	9.18
2001	8.01	7.47

Source: *AgLetter: The Agricultural Newsletter For The Federal Reserve Bank of Chicago*, November 2001

Bankers also report that fund availability is higher than it has been in recent years. This is partly because farmers have been demanding less credit. But it may also reflect a decrease in loan demands by consumers or non-farmer businesses. With

the nation in a recession, consumers are curtailing their use of credit in fear of being laid-off and forced to live on unemployment benefits for an extended period of time. Non-farm businesses are also scaling back investments in fear of having to cope with the problems stemming from an economic slow-down.

Credit supplies for farmers in 2002 should be plentiful. As a result, competition among bankers should allow farmers to negotiate some favorable terms on loans with respect to repayment periods and collateral requirements. Farmers considering expansion or modernization projects might want to take advantage of the favorable terms that can be gained while lenders have surplus funds available to loan.

Rents for Wisconsin Farmland

According to the National Agricultural Statistics Service, the cash rents paid on Wisconsin cropland and pasture in 2001 were largely unchanged from 2000. The average cash rent paid on cropland rose $1.00 per acre from $65 in 2000 to $66 in 2001, while cash rents for pasture dropped $2.00, from $38 to $36 per acre. This decline in pasture rents may have occurred because beef and dairy cow inventories were lower in 2001. Fewer cows need less pasture.

Given limited prospects for higher crop and cattle returns in 2002, cash rents for both cropland and pasture should be near their 2001 levels. Despite lower commodity prices, large drops in cash rents are unlikely. There will continue to be a demand for rentable farmland and pasture from renters who want to maintain control of farmland that they have been renting. These farmers are generally willing to pay as much rent as they have in past years, because renting is cheaper than the annual cost of purchasing the land.

Wisconsin Average Cash Rents For Cropland and Pasture, Dollars per Acre

Year	*Cropland*	*Pasture*
1997	55.00	30.00
1998	60.00	34.00
1999	62.00	38.00
2000	65.00	38.00
2001	66.00	36.00

Source: Agricultural Cash Rents 2001 Summary, July 2001, Agricultural Statistics Board, NASS, USDA

Farmland Values

The Wisconsin farmland market continues to yield large financial gains. According to the Wisconsin Agricultural Statistics Service, the average value of an acre of Wisconsin farmland increased from $1,878 in 1999 to $2,256 in 2000. This increase of just over 20 percent is far superior to the gains possible on most stocks and bonds.

The dramatic jump in farmland values last year was a continuation of a trend that began in the early 1990s. From 1996 to 2000, the average value of an acre of Wisconsin farmland has increased nearly 76 percent, from a value of $1,284 to

$2,256. During this same period, farm incomes have been steady to declining, which normally puts downward pressure on farmland prices. Clearly, something besides farm income is driving the farmland market.

Anecdotal evidence suggests that farmland values are being driven up by non-farmers who are purchasing rural land for residential or recreational purposes. These new entrants into the farmland market have equity to invest in farmland and discretionary income to service mortgages. Such non-farm investors' interest in farmland has yielded premium land prices for farmers who have been willing to sell some or all of their acreage. Increased demand for land also benefits farmers who don't sell because it increases their net worth and loan collateral.

However, the current farmland market could be positioned for a slide similar to the one that occurred in U.S. stock markets in 2001. With the economy in a recession, more and more employers are starting to issue layoff notices. Higher unemployment will bring financial difficulties to many households. The threat of layoffs will discourage people from spending money on luxury items such as recreational land or rural estates. Hence, the demand for farmland could fall slightly until the general economy rebounds.

It is possible that the U.S. economy may not recover in the last half of 2002 as some are currently forecasting. A longer recession could trigger a sharper downturn in the Wisconsin farmland market. Under this scenario, non-farm owners of farmland would sell their farmland holdings in order to reduce their debts or raise cash needed to cover pressing bills. A few forced sales of farms used for recreational purpose could put significant downward pressures on farmland values and trigger further declines as others try to liquidate their land holdings to avoid capital losses. This doomsday scenario is not likely to play out in the near term. However, it is possible if the U.S. economy is in recession for an extended period. Farmland values fell sharply 20 years ago and they could do so again if conditions are right.

Part III: Special Articles

The Macroeconomic and Policy Environment Created by the Events of September 11, 2001

Bill Dobson (262-8965)

National Bureau of Economic Research (NBER) economists announced in November 2001 that the U.S. economy had slipped into recession in March 2001, after 10 years of expansion. NBER economists – the Nation's leading authorities on business cycles – define a recession as a widespread decline in economic activity lasting more than a few months. NBER's preferred gauges are industrial production, employment, real incomes, wholesale sales and retail sales. One NBER economist and many other macro economic forecasters have speculated that the United States might have skirted the recession absent the traumatic events of September 11.

Root causes of the recession are well known. Business investment shriveled after it became apparent that internet and related high-tech investments would not deliver expected profits. In a closely related development, the high-tech stock bubble burst, reducing consumers' wealth and confidence. And equipped with hindsight, it is evident that the Federal Reserve contributed to the economy's troubles by continuing to increase interest rates after the economy had already begun to slow in late 2000. These are ominous developments that – combined with the terrorist activity of September 11 – tipped the U.S. economy into recession.

Major U.S. corporations suffered one of the worst profit squeezes in the post-WWII period in the third quarter of 2001. Profits of the largest U.S. corporations fell 72 percent in this quarter compared to year-earlier levels. In the agricultural sector, Deere – the largest U.S. farm equipment manufacturer – reported a loss of $320 million for the quarter ended October 31, 2001. For November 2001-January 2002, Deere estimates that its net sales will fall by 3 percent to 7 percent, with full-year equipment sales flat to up slightly from year-earlier levels.

Major layoffs have accompanied the fall in profits. Thus, the U.S. unemployment rate rose to 5.7 percent in November 2001, up from 4.2 percent at the beginning of the year. U.S. unemployment is expected to average about 5.7 percent for the fourth quarter of 2001 and peak at about 6.3 percent during the second and third quarters of 2002. The low (circa 4 percent) unemployment rates of 2000 are unlikely to return for several years, if ever.

The events of September 11 have not affected all sectors of the economy evenly. The airlines, hotels, tourism and entertainment-related businesses have been hit particularly hard. Farmers and agricultural businesses supplying these industries have felt the impact. For

example, suppliers of high-grade beef – often served during conventions and at hotels – have been dealt a substantial blow by developments affecting travel businesses. A decline in U.S. beef exports to Japan as a result of a BSE (bovine spongiform encephalopathy) outbreak in that country have added to beef producers woes.

How Much Did the Events of September 11 Shrink U.S. Economic Growth?

No one knows for sure but forecasts made by DRI-WEFA – a well-known macroeconomic forecasting group – before and after the terrorist attacks give an approximation. In particular, DRI-WEFA's forecasts of U.S. real gross domestic product (GDP) growth made immediately before September 11 in August and September of 2001 and after September 11 produced the growth differences noted below.

DRI-WEFA predicts that the U.S. economy will be hit hardest in the fourth quarter of 2001 and the first quarter of 2002 when real GDP growth will be about four percentage points lower than in the absence of the events of September 11. The figures also indicate that the performance of the U.S. economy in the last half of 2001 will cause it to meet the popular definition of a recession – two consecutive quarters of negative real GDP numbers. Interestingly the forecasts suggest that there will be a V-shaped recovery featuring rapid economic growth (above the trend growth rate of 3.5 percent) in the second half of 2002. Given all the uncertainties that could affect the economy by the end of 2002, such forecasts are of course highly speculative.

Year and Quarter	DRI-WEFA Forecasts of Real GDP Growth*		
	Prior to 9/11	After 9/11	Difference
2001: Q1	1.3%	1.3%	0.0%
Q2	0.3	0.3	0.0
Q3	1.3	-1.1	-2.4
Q4	2.1	-2.1	-4.2
2002: Q1	2.3	-1.6	-3.9
Q2	2.8	2.5	-0.3
Q3	2.7	3.8	1.1
Q4	2.6	5.1	2.5

*Sources: DRI-WEFA, U.S. Forecast Summaries, August, September, and November 2001. Figures for 2001 Q1 and Q2 are actual figures. The figure for 2001 Q3 in the "After 9/11" column is a revised actual figure.

Why the Rosy Scenario?

DRI-WEFA's forecast of an economic recovery beginning in the second quarter of 2002 is similar to one issued by the National Association of Business Economists (NABE). NABE economists forecast that there will be real GDP growth of 3 percent for the second quarter of 2002. However, the DRI-WEFA and NABE forecasts are rosier than others that indicate that economic recovery will not begin until the third quarter of 2002. Forecasts of an early recovery appear questionable given the collapse of ENRON Corporation and Federal Reserve's late-November 2001 showing that the economy remained weak from October through mid-November, 2001. In addition, the continued consumer pessimism, the jittery stock market and weakness in commodity prices during late 2001 do not foreshadow an early start to the recovery.

Several factors account for the expected recovery of the U.S. economy beginning in the second or third quarter of 2002:

- The Federal Reserve has cut short-term interest rates 11 times in 2001, producing the lowest rates in 40 years. While monetary stimuli have a lengthy lag – perhaps as much as a year – the lower short-term interest rates should begin to stimulate the U.S. economy by mid-2002.

- The Bush tax cuts, which will total about $1.35 trillion over 10 years and which had pumped about $38 billion into bank accounts of U.S. consumers by late 2001, will add to the economic stimulus provided by the Federal Reserve.

- The Congress and Administration are considering additional fiscal stimuli.

- Oil prices have dropped about 25 percent in the aftermath of the events of September 11. Edward Yardini, a Deutche Bank Economist, estimates that each $1 drop in crude oil prices has the effect of a $9 billion tax cut. Oil prices, which started 2001 at around $25 per barrel and later traded over $30 per barrel, slumped more than 25 percent following the September 11 attacks. If Yardini's arithmetic is approximately correct, the decline in oil prices from $25 per barrel to $18 or $19 per barrel in late November 2001 (if maintained) would be equivalent to a $54 billion to $63 billion tax cut.

- Refinancing of home mortgages in 2001 and early 2002 could put an additional $20 billion in the pockets of U.S. consumers.

- The average post-WW II recession has been 11 months in length. Thus, the inventory liquidations, layoffs, and other business adjustments to deal with the recession together with the monetary and fiscal policy measures in place should begin to produce real GDP growth beginning before mid 2002.

What Could Go Wrong?

Doomsday scenarios that include deflationary developments that push the nation into a lengthy slump like the one experienced by Japan for the past 10 years are possible but unlikely. The

more likely problems – that could delay the U.S. economic recovery and cause it to be less robust – include those noted below:

- Excesses of the 1990s relating to high-tech investments and the stock market bubble may not be fully wrung out of the U.S. economy until substantially after mid-2002.

- The current U.S. recession coincides with a global recession. Office of Economic Cooperation and Development (OECD) economists forecast that growth in the 30-country OECD group will resume in the last half of 2002. If the OECD forecast is too sanguine, export demand for U.S. goods and services will languish during much of 2002.

- Consumer demand may continue to show the weaknesses exhibited during the fall of 2001.

- While short-term interest rates are low, firms with less than outstanding profit prospects may continue to be denied credit by banks. This development would blunt the impact of the Federal Reserve's interest rate cuts.

- The Congress and Administration may adopt an additional stimulus package that carries little real economic stimulus.

- Additional terrorist activity occurs.

Such developments could eliminate any growth in the U.S. economy until the third quarter of 2003 or later. The wild card of course is possible additional terrorist activity, the effects of which are largely unpredictable.

While negative scenarios could produce a prolonged recession, the long-term economic prospects for the U.S. economy appear bright. Productivity of the economy is likely to grow substantially over the longer-run. In addition, the damage done to the huge U.S. economy by the terrorist activity of September 11 should not be overestimated. Professor Gary Becker, a Nobel Laureate from the University of Chicago, points out that under a maximum loss scenario the damage to New York's World Trade Center and the Pentagon would be about $60 billion. (This figure includes costs of damage to buildings and surrounding facilities, the value of planes lost, and the lost productive capacity of those killed.) The $60 billion figure equals only about 0.2 percent of the physical assets of the U.S. economy and 0.06 percent of the nation's total productive assets. Becker adds that terrorism could add $11 billion per year to costs of the airline industry, and impose a cost on the economy equal to about 0.1 percent of GDP. While conceding that these are not trivial costs, he points out that the terrorism problems will impose a substantially lower cost on the U.S. economy than the oil price shocks of 1974-75 and 1979-81.

Impacts on the Policy Environment

What a difference a year makes to the policy environment. In January 2001, the Congressional Budget Office predicted that there would be a federal budget surplus of $313 billion for the fiscal year ending on September 30, 2001. Accordingly, early in 2001 the

battle in Congress was over how to preserve funds in the Social Security Lock Box, overhaul Social Security, provide lower cost prescription drugs for seniors, and provide suitable tax cuts. The tax cut was delivered but the other measures are now fading memories. As a result of the events of September 11:

- New expenditures of $15 billion were authorized for a bailout of airlines.

- A cash safety net is being considered to shore up the insurance industry which apparently will receive up to $70 billion in September 11 related claims.

- A $40 billion emergency terrorism bill was signed into law a week after the September 11 attacks.

- Military costs for the Afghanistan campaign run about a billion dollars a month.

- Additional federal outlays will be required for the expected economic stimulus package.

Budget analysts now expect a federal budget deficit of $40 to $50 billion for fiscal 2002. This figure could grow to $100 billion if, as is likely, additional tax cuts and net spending increases materialize. However, federal government spending during fiscal 2002 will still be only about 19.5 percent of GDP, which is lower than during the Reagan years. Moreover, the moderate-size deficits that will be with us through 2005 are not necessarily worrisome since deficits frequently reflect good economic policy during recessions. Whether the prospective deficits reflect good economic policy depends in part on whether the economic stimuli provided by additional government spending actually contributes to a sound recovery of the U.S. economy.

When this piece was written, it was unclear what, if anything, would be provided in the economic stimulus package. However, we can assess whether any new stimuli will help pull the economy out of recession by evaluating measures that emerge against these rules of thumb:

- Government spending gives a bigger boost in demand than income tax cuts, part of which will be saved.

- Tax cuts aimed at low-income earners are more likely to be spent than tax cuts for high-income people, who tend to save more.

- Permanent corporate tax cuts are unlikely to boost investment, which is influenced more by profits, excess capacity, and confidence.

- A temporary tax break for investment may encourage firms to expedite investments scheduled for later.

Of course, we may never know for certain whether any new stimulus package is helpful because it will contain pieces of all the above points and its effects will be intertwined with impacts of stimuli that were implemented earlier.

While the federal deficits appear manageable, the fiscal problems facing Wisconsin and other state governments are more severe. One study by a regional economic forecasting firm indicates that

four out five U.S. states were in recession in late 2001. Tax revenue shortfalls facing the states create serious problems because states are typically prohibited from running deficits,

Implications for Farm Programs

Both the U.S. Senate and the House have developed farm programs to replace the 1996 Farm Bill. As of this writing, the Senate bill had not yet received approval of the full Senate. The House bill has been approved by the full House of Representatives. Both bills carry large budget outlays, reflecting the appropriations resolution passed for agriculture earlier in 2001 before the events of September 11. The Administration has problems with both bills – especially with the large budget outlays that the bills carry. It is unclear when a 2002 Farm Bill will emerge from a Senate-House conference. Farm state legislators are trying to get a new farm bill passed before competing legislation makes less money available.

The precise nature of the 2002 Farm Bill is unknown at this writing. It is likely to involve large budget outlays since the 2001 recession has reduced demand for most farm products and reduced farm prices. In addition, the policy environment has changed sharply in other ways from the environment that existed before passage of the 1996 Farm Bill. In the mid-1990s farm exports were strong and were thought to provide an environment where farm price supports could be gradually phased out.

New types of legislation are being structured as a result of the September 11 events and the anthrax problems. For example, Senator Pat Roberts of Kansas is developing an agricultural provision for a bio-terrorism bill. The Roberts legislation would provide about $1 billion to update animal disease laboratories and fund other organizations that respond to an outbreak of crop and livestock disease. Additional measures to improve food safety will emerge in the 2002 Farm Bill or other legislation.

A Review of Wisconsin's Farmland Use-Value Assessment Program

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In 1995, the Wisconsin legislature passed legislation that profoundly changed how property taxes are calculated for farmland.[2] Before passage of the new law, farmland was taxed according to its market value, as is all other private property in the state. With the new law in place, farmland is taxed according to its *use-value* – income generated from farming. Similar tax policies have been adopted in many other states.

This legislation has substantially reduced the property tax burdens of Wisconsin farmers, making it economically feasible for many of them to continue farming land that has increased in market value because of speculative pressures unrelated to farm profitability.

Prior to 1995, farmland property taxes were increasing relative to the returns that farmers were earning from cropping their land. This was particularly true near metropolitan areas, where residential and commercial demand for real estate was pushing farmland values to $3,000 per acre or more. As land values rose, so did property taxes. In some cases, farmers could no longer afford to hold their farmland. They were being taxed off their land.

This problem spurred the passage of the legislation that established Wisconsin's use-value assessment system.

Use-value assessment applies only to farmland. Houses, farm buildings and land owned by farmers but used for non-agricultural purposes are still assessed at market value. The system was first used in 1998. The legislation called for it to be phased in over 10 years by gradually increasing the proportion of the farmland property tax calculated using use-value and decreasing the proportion calculated using market value.

In late 1999, however, the Wisconsin Department of Revenue issued a temporary ruling that eliminated the phase-in and ordered full implementation of use-value assessment for 2000. Subsequent legislative actions made the temporary order permanent.

Wisconsin's use-value assessment program has clearly benefited the state's farmers. Based on Wisconsin Department of Revenue data, the Wisconsin Farm Bureau has estimated that farmers paid $106 million in property taxes on farmland in 2000. Using market value assessment, the comparable tax burden would have been $305 million.

The program has significantly reduced farmers' tax burdens and, more importantly, it has tied farmers' property taxes to their incomes. This linkage of property taxes to farm income has transformed the state's farm property tax system from a regressive system to a progressive system, in which taxes are assessed according to the taxpayer's ability to pay them.

[2]A revision in the manner of assessing agricultural land was authorized much earlier by a constitutional amendment approved in 1974.

How Use-Values Are Calculated

Farmland use-value per acre is defined as the ratio of *farming returns* to the *capitalization rate* of farmland. Farming returns are narrowly defined as net returns earned from growing corn. Returns are computed using county corn yields and statewide averages for the market price of corn and the per-bushel cost of producing corn. These data are obtained from published USDA reports.

Farming return per acre is calculated on a county-by-county basis by multiplying the five-year moving average estimated net return per bushel (Wisconsin annual corn price less the estimated Wisconsin costs of production for corn) by the five-year moving average reported corn yield. Regional differences in the returns to land are reflected in the county yield data used to compute returns to land. Yields for northern Wisconsin counties are relatively low compared to yields in southern counties. Therefore use-value assessments are generally lower for northern counties.

The capitalization rate used in estimating use-value assessments is computed by adding the local property tax rate (expressed as a percent of total assessed value) to the five-year moving average of interest rates charged on specified real estate mortgages in Wisconsin by the Farm Credit System.

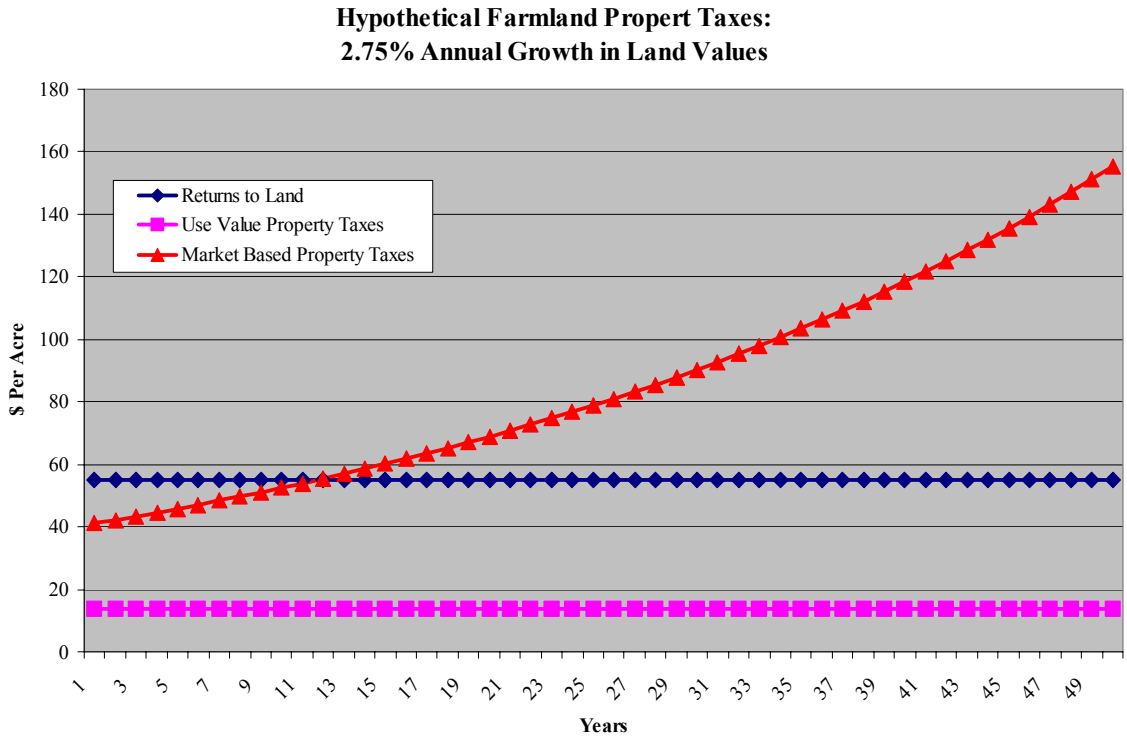
How Use-Value Has Changed the Financial Position of Farmers

Use-value has dramatically improved the financial situations of farmers. This point is illustrated by the returns and property taxes chart shown below, which contrasts the use value system with the market value system that was previously used to tax farmland.

This hypothetical case assumes that a constant net income of $55 per acre is earned annually on farmland that has an initial market value of $2000 and a use-value assessment of $687.50. The use-value reflects returns to land of $55 and a capitalization rate of 8 percent. The capitalization rate is the sum of an assumed 6 percent average interest rate charged on specified Farm Credit System real estate mortgages and an assumed 2 percent property tax levy on the assessed value of farmland.

The annual taxes paid on the farmland under the use-value assessment system are $13.75 per acre. These taxes are computed by taking 2 percent of the $687.50 use-value assessment. The annual use-value taxes are unchanged over time because they are tied to returns to land. Since returns to land are assumed to remain constant, property taxes hold steady as well.

The taxes paid under the market value system are substantially higher than those associated with the use-value system. The market-based property taxes are initially $40 (2 percent of the $2000 market value of land) and increase each year by 2.75 percent as the market value of land rises by the same rate.



The chart shows that as the land appreciates in value, property taxes rise relative to returns to land if the farmland is taxed on the basis of its market value. This escalation of property taxes erodes the cash flows of the landowner such that, in year 11, property taxes exceed the returns from the land. For all years beyond year 11, the landowner has to come up with cash from other sources to offset the difference between crop returns and property taxes. This example represents the situation some farmers faced when property taxes were tied to he market value of land.

Use-value assessment maintains a constant relationship between returns to land and property taxes so that property taxes do not exceed returns to land. Accordingly, a landowner is less likely to be forced into a negative cash flow position that may require tapping into cash reserves or selling the land.

Penalties for Developers

Under the use value law, developers must pay a penalty if farmland is converted from farming to other non-farm uses. This penalty generally amounts to two year's worth of back taxes at the full market rate.

Some critics of use value feel this penalty does not offset the preferential tax treatment developers enjoy while they are holding farmland for future development. But use-value assessment also penalizes developers by making it more difficult and costly for them to get farmland out of farmers' hands.

That's because use-value reduces the farmer's cost of holding land, just as it reduces the developer's holding costs. This means farmers are under less pressure to sell land – they can bide their time waiting for developers to up their bids on the land they want to acquire. This point is illustrated by the return and property tax chart shown above.

The chart shows that a use-value property tax system creates substantial tax savings for farmland owners. In this particular case the savings are roughly $40 to $50 per acre per year early on and well over $100 in years 40 through 50. These tax savings represent wealth gains for farmers.

The present value of the indicated tax savings over 50 years is roughly $2,300 assuming a real cost of capital of 3 percent. This is the amount by which developers would have to increase their bids for land in order to get the landowner to consider selling. Alternatively, it can be viewed as a penalty that use-value assessment imposes on developers.

This greater cost to developers should discourage them from developing farmland and keep more land in farmers' hands. If so, use-value will have accomplished what it was intended to do.

Impacts on Local Governments and Homeowners

According to the Department of Revenue, agricultural land comprised only 1.6 percent of Wisconsin's $312.4 billion equalized valuation as of January 1, 2001. This means that reductions in farmland assessments brought about by use-value have had negligible statewide impacts. Department of Revenue estimates suggest that reductions in farmland assessments only boosted property taxes 17 cents per $1,000 on a median-valued home (statewide worth $101,874) in 2001. This constitutes an increase of 0.8 percent from 2001.

But while use value assessment has negligible impacts statewide, it has a substantial impact on counties where farmland accounts for a major portion of equalized values. According to Department of Revenue 1995 estimates, farmland value as a proportion of total equalized value was over 40 percent for Lafayette County and almost 25 percent for Iowa County. Counties like these are being severely affected by the shift to use-value assessments because of the subsequent reduction in local tax revenue.

And things could get worse. Use-value assessments will likely head downward in the near term as corn prices keep slipping and production costs increase.

The table below shows price and cost data used to compute use-values in Wisconsin for the tax years 2000-2002. Note that the differences between the moving averages for the price of corn and the per-bushel cost of production have been narrowing. This has driven down calculated returns to land and decreased use-values. The related decline in use-values between the tax years of 2001 and 2002 is expected to be between 30 and 40 percent.

Barring a major rebound in corn prices, it is likely that use-value assessments on

farmland will fall again in 2003 and, perhaps, 2004. Lower assessment values will be welcomed by farmers, but will create more serious problems for local governments and school districts that are heavily dependent on farmland property taxes as a source of revenue.

In farming-dependent counties, budgets are being squeezed to the point of forcing cutbacks in public services or higher tax levies on residential and commercial property. In either case, taxpayer complaints are inevitable. Complaints are especially vociferous if property taxes rise faster than the average earnings of non-farm homeowners and others who pay property taxes. Serious questions may be raised about the fairness of use-value assessment, based on ability to pay, when other taxpayers are not treated similarly.

The decision to assess farmland on the basis of use-value may ultimately trigger reforms in the taxation policies of local Wisconsin governments. Since assessments on farmland are tied to farm income levels, farmland assessments are not likely to increase. In order to gain the property tax revenues lost on farmland, local governments in rural areas may have to levy more taxes on homes or request special funding from the state.

Corn Price and Cost of Production Data Used To Compute Use-Value Assessments In Wisconsin

Annual Data Used in Computing Five Year Moving Averages			*Five Year Moving Averages Used in Computing Use-Values*		
Year	***Corn Price***	***Avg. Cost of production***	***Tax Year***	***Corn Price***	***Avg. Cost of Production***
	Dollars per Bushel			**Dollars per Bushel**	
1993	2.19	2.03			
1994	2.37	1.50			
1995	2.46	1.96			
1996	3.54	2.14			
1997	2.53	2.02	2000	2.62	1.93
1998	2.15	2.10	2001	2.61	1.95
1999	1.80	2.14	2002	2.50	2.07

When faced with the choice of raising local property taxes or going to Madison, local politicians will probably opt for the latter because it would generate less political fallout. But the chances of special funding from the Wisconsin legislature are slim to none given the current condition of the state's budget. At least for now, homeowners and commercial property owners will have to make up any revenue shortfalls caused by use-value assessments for farmland.

Court Challenges

The Wisconsin Supreme Court has agreed to hear two suits challenging use-value assessment.

The first lawsuit involves the constitutionality of freezing farmland assessments at their 1995 levels when use-value was first implemented. Milwaukee Mayor John Norquist, joined by mayors of several other large Wisconsin cities, initiated this suit.

The second case pertains to the Department of Revenue's decision to fully implement use-value at the outset, rather than phase-it in over a 10-year period as was specified by the enabling legislation. The Wisconsin Attorney General issued an opinion in early 2000 that the Department of Revenue did not have statutory authority to eliminate the phase-in. Subsequent legal action to reinstate the phase-in was initiated by private parties, but is being funded by the state.

The resolution of these cases will not be known for some time. If the state's high court rules that either use-value assessment violates the uniformity clause of the state constitution, or that use-value must be phased in according to the schedule spelled out by lawmakers, then Wisconsin farmers would find themselves in a position of having underpaid their property taxes. At the same time, other taxpayers would have overpaid property taxes because of the higher levies necessary to offset use-value assessments. It is not clear if, or how, deficient taxes could be collected and excess taxes returned.

Status of the Wisconsin Cranberry Industry

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Cranberries are an important contributor to the state's agricultural economy. More than 240 growers are located in the state, along with several cranberry receiving stations and other handling and processing facilities. A 1995 study estimated that the cranberry industry supported 7,200 jobs and contributed $334 million to gross state product.[3]

Commercial cranberry production in Wisconsin is almost as old as the state itself, dating to the early 1860's. The first commercial marshes were established near Berlin by cultivating native cranberry vines. In the late 19th and early 20th centuries, production expanded to natural wetland areas near the central part of the state. Later, marshes were developed in the north around Manitowish Waters, Eagle River, Spooner, and Hayward.[4] By the 1950's, Wisconsin was a major industry player, second only to Massachusetts in production.

The 1997 Census of Agriculture identified 11 Wisconsin counties with commercial cranberry acreage. Three counties (Jackson, Monroe and Wood) accounted for about two-thirds of the state's production in 1997.[5]

The Cranberry Boom

Growth in cranberry production was relatively slow until the 1970's because of limited markets. Consumption was primarily in the forms of fresh cranberries and cranberry sauce during the Thanksgiving and Christmas holidays.

During the 1960's, processors began blending the tart juice of cranberries with sweeter fruit juices like apple and pear to make beverage products that proved to be very popular. Twenty years later, medical research demonstrated the efficacy of cranberry juice blends in preventing urinary tract infection, setting off a further boom in demand for cranberries.

Prices rose rapidly, with handlers competing strongly against each other for growers' fruit. Growers responded to higher prices by planting new marshes, renovating existing marshes with higher-yielding varieties, and adopting yield-enhancing production practices. Wisconsin harvested acreage grew from less than 6,000 acres in 1970 to more than 14,000 acres in 2000. Yield per acre grew from just over 100 barrels[6] per acre in 1970 to a peak of 226 barrels in 1999. New acreage was added at the rate of nearly 1,000 acres per year between 1993 and 1998.

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[3] See *The Economic Impact of the Wisconsin Cranberry Industry: 1995 Update*, College of Agricultural and Life Sciences, University of Wisconsin-Madison, December 1997. Available at http://www.library.wisc.edu/guides/agnic/cranberry/marketing.htm.

[4] An excellent source of historical information on the Wisconsin cranberry industry is the Wisconsin Cranberry Growers Association web site at http://www.wiscran.org/history.html

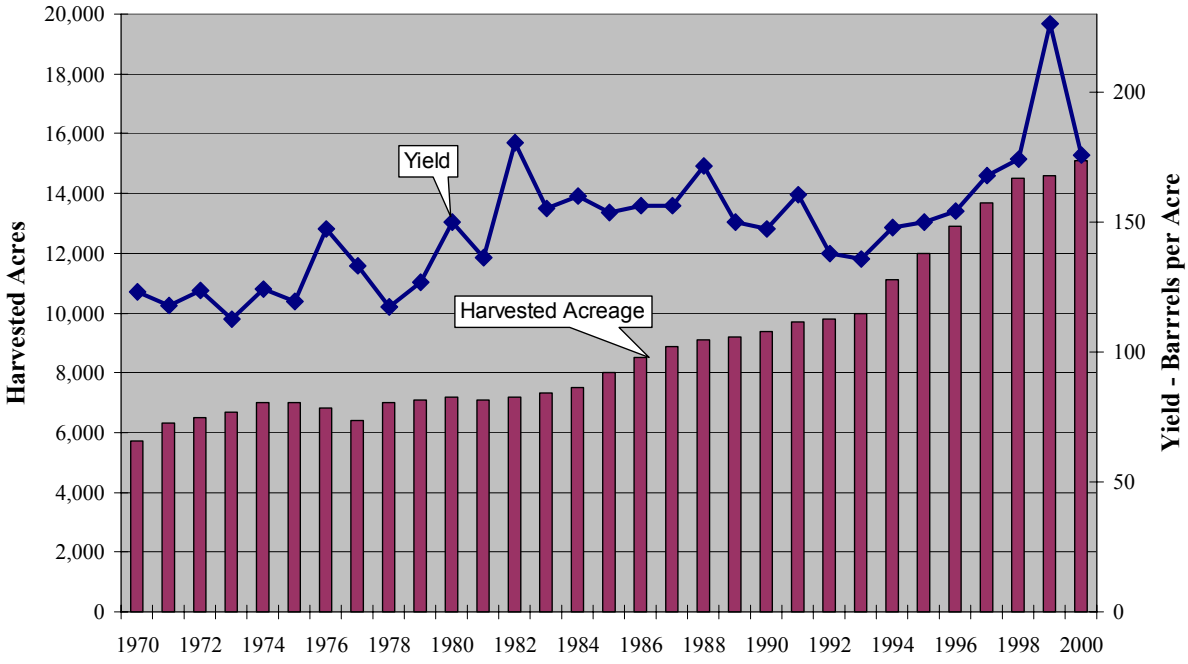
[5] Published county-level cranberry production data is only available through the agricultural census, which is only conducted every five years. State-level data are published annually by the National Agricultural Statistics Service of USDA

[6] A cranberry "barrel" is 100 pounds (one hundredweight). The terminology dates to the 19th century when fresh cranberries were transported to urban markets in 100-pound wooden barrels.

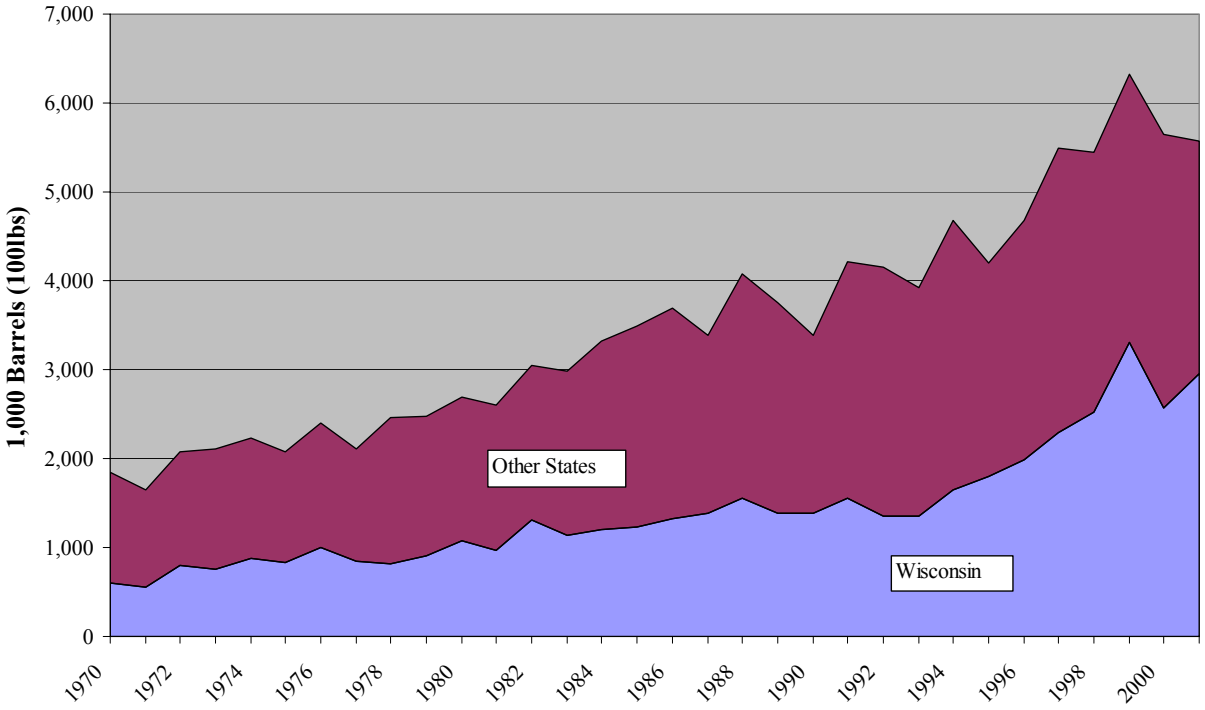
Wisconsin County Cranberry Statistics, 1997

County	No of Farms	Acreage Harvested	Harvested Production	
			Barrels	% of Total
Adams	13	400	41,700	1.8
Burnett	3	188	32,737	1.4
Jackson	32	2,517	449,490	19.7
Juneau	8	1,001	191,966	8.4
Monroe	47	2,327	397,849	17.5
Oneida	6	597	94,958	4.2
Portage	13	625	69,802	3.1
Sawyer	7	423	50,118	2.2
Vilas	7	628	97,957	4.3
Washburn	7	387	50,397	2.2
Wood	54	3,727	635,162	27.9
All Other	10	941	166,430	7.3
State	207	13,761	2,278,566	100.0

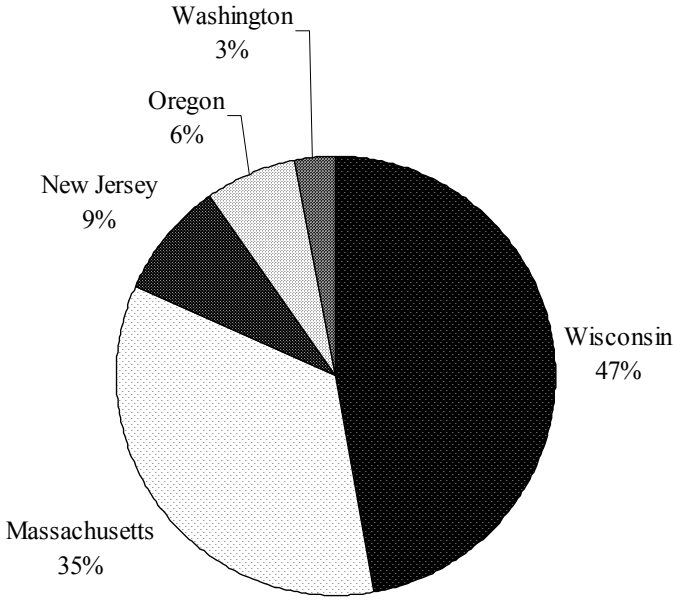
Wisconsin Cranberries:
Harvested Acreage and Yield



Wisconsin's Share of U.S. Cranberry Production



Estimated Shares of U.S. Cranberry Production, 2000



Total U.S. Production: 5.6 Mil. Bbls.

While other cranberry producing regions also expanded production, new plantings and yield increases in Wisconsin surpassed those in other states. Wisconsin overtook Massachusetts to become the leading producing state and currently supplies about half of the U.S. cranberry supply.

Grower prices rose from $10-15 per barrel in the early to mid-1970's to average more than $40 during the 1980's. From 1989 to 1997, grower prices increased from $40 to $65 per barrel. These prices compare to estimated annual production costs of $30-$45 per barrel.

By 1997, the farm-level value of Wisconsin cranberries had reached $150 million, accounting for 87 percent of the total farm cash receipts for all fruits and 2.6 percent of total farm cash receipts. The value of cranberries in 1997 exceeded the value of all processing vegetables combined.

The Cranberry Bust

During the euphoria of the mid-1990's, an impending serious market disequilibrium was fairly predictable and probably inevitable. Some fundamental supply and demand factors led to a collapse in prices.

Cranberries are a perennial crop that reach full bearing potential five to seven years after planting and have a bearing period approaching infinity (some active bogs are more than 100 years old). New plantings in the 1990's were mostly of hybrid varieties with yields double to triple state average yields. Bed development costs are $20,000-$30,000 per acre, several times the annual cultural costs. On the supply side: A lagged supply response to supra-normal profits combined with a high fixed to variable cost ratio that impedes resource adjustment.

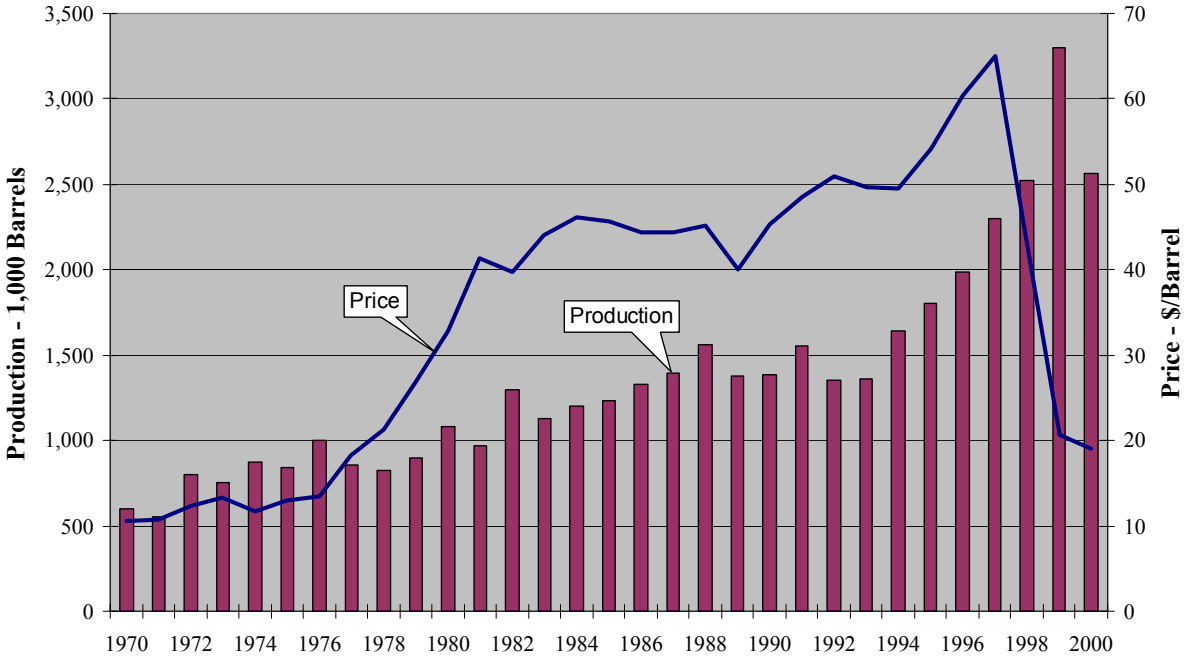
Stated differently, growers and potential growers responded as expected to attractive prices by making large long-term investments in marsh development. In the long period between planting and full harvest, market conditions had deteriorated badly, no longer justifying the decision to plant. But the large investments represented sunk costs, and the annual cultural and harvest costs were still less than the heavily depreciated crop value. So there was no economic incentive to abandon marshes.

Cranberry juice blends retained their popularity, but faced increasing competition from other fruit juices. The demand boost from perceived health effects proved to be one-time. On the demand side: Market saturation and intensifying competition.

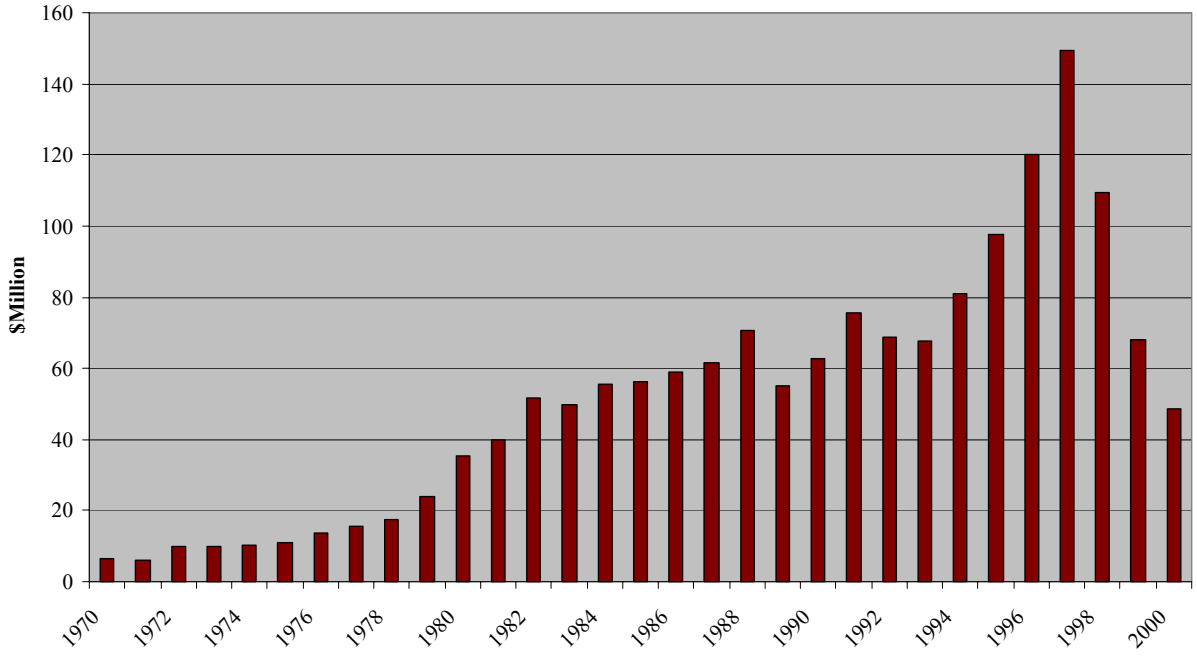
The crash occurred rapidly. In 1998, U.S. cranberry production was record high (5.5 million barrels) and sales slipped from year-earlier levels. As a result, year-end cranberry inventories jumped from their normal 20-30 percent of sales to more than 50 percent. Season average grower prices in Wisconsin fell from $65 to $43 per barrel.

The1999 crop year brought another production record of almost 6.4 million barrels. Wisconsin, with most of the newer cranberry acreage, produced 40 percent more cranberries than in 1998. Sales continued to slump, and by the end of harvest, it became clear that ending inventories would approach one year's sales. Season average grower prices in Wisconsin fell from $43 to $21 per barrel.

Wisconsin Cranberries:
Production and Season Average Grower Price



Wisconsin Cranberries:
Total Crop Value



In light of the severely depressed market, the industry brought its supply-restricting federal marketing order out of mothballs in 2000. The cranberry marketing order was implemented in 1962, but its supply control provisions had not been invoked since 1971. Upon recommendation of a grower committee (Cranberry Marketing Committee) and approval of the Secretary of Agriculture, the order authorizes use of two methods of controlling supply: *Handler withholding* requires receiving handlers to limit sales in commercial outlets to a specified percentage of receipts. *Producer allotments* restrict grower deliveries to a specified percentage of their average historical deliveries (sales history[7]).

In March 2000, the Cranberry Marketing Committee proposed use of producer allotments at 85 percent of sales histories for the 2000 crop year. The Secretary of Agriculture approved the Committee's recommendation, but not until July. This limited the ability of growers to adjust cultural practices to match deliveries to allotments. Furthermore, the Secretary mandated additional allotment for newer acreage, expanding eligible deliveries beyond the Committee's recommendation of 5.4 million barrels.

While down from 1999, the 5.6-million-barrel U.S. crop in 2000, along with continued sluggish sales, brought little improvement in grower prices and no anticipated reduction in the burdensome inventories. State cranberry grower associations turned to Congress for assistance and received $20 million for market loss payments to growers and $30 million for USDA purchases of cranberries for domestic food programs in 2001. But it was clear that further supply cuts would be necessary through the marketing order if meaningful market price gains were to be achieved.

For the 2001 crop, the Cranberry Marketing Committee proposed and the Secretary approved using allotments to limit deliveries of processed fruit to 4.6 million barrels with no restriction on deliveries of fresh fruit. This translated to an allotment of 65 percent as applied to calculated processed sales histories. As in 2000, growers with newer acreage had their sales histories augmented beyond actual sales experience.

While final harvest numbers are not yet available, the 2001 U.S. cranberry crop is expected to yield about 4.2-4.5 million barrels of processing fruit and 300,000-350,000 barrels of fresh fruit. This is below the industry processing fruit goal of 4.6 million barrels. Application of the marketing order was only partly responsible for the light crop – weather-related cultural problems played a significant role.

Inventories at the beginning of the 2001 crop season were 3.66 million barrels, reduced mainly by the $30 million government purchases. This is still high by historical measures, but a marked improvement over the 4.27 million barrels in storage when the 2000 crop season began.

[7] Sales histories are calculated as average grower deliveries for the best four of the last six years (2000) or seven years (2001). So sales histories exceed expected production, leading to some "slippage" in the sense of the allotment percentage being smaller than if applied to expected production.

The Future

The last two years have brought Wisconsin cranberry growers huge economic losses and widespread financial and personal stress. The very low prices in 1999 and 2000 have spelled red ink for practically every cranberry grower. Bankers are nervous, but seem reluctant at this point to call loans on marshes that have substantially fallen in value. Growers have seen their equity, built over many years, evaporate. Many face major cash flow problems. Most growers have been forced to discharge valued long-term employees as part of belt-tightening strategies. Many have been forced to accept or increase off-farm employment to make ends meet.

Fortunately, there is reason for optimism. The 2001 crop is the smallest since 1996. Inventories remain high, but closer to being manageable than were projected before the USDA purchases. Sales appear to be picking up, partly due to lower prices for cranberry products and partly due to aggressive promotion and the introduction of new products (e.g., Ocean Spray's white cranberry juice and Northland's "27% Solution" cranberry juice blends). Through the Cranberry Marketing Committee and state cranberry grower associations, growers have committed more money for health-related research to expand demand. The Cranberry Marketing Committee and handlers have increased funding to develop foreign markets.

These marketing efforts and a better supply-demand balance should bring higher season-average prices for the 2001 crop. How much higher is hard to predict at this time, since most growers are paid from revenue pools based on crop-year sales. Early indications are for season-average grower prices in the $18-23 per barrel range. This will not bring profitability to the industry. But it does represent a turnaround and a promise of better times ahead.

How long recovery takes depends on how rapidly sales can be increased and how much marsh acreage is idled or abandoned. Currently, there is excess productive capacity in the cranberry industry. With good growing conditions and without marketing order restrictions, a U.S. crop of 6.5-7.0 million barrels can be produced on current bearing and nonbearing acreage. Optimistic annual sales projections in the near term are 6.0-6.5 million barrels. Thus, given the current acreage base and yield potential, it will take time for demand to catch up with supply at prices that are sustainable for growers. To minimize grower financial stress in the interim, it may be necessary to continue limiting supply through the cranberry marketing order.