STATUS OF WISCONSIN AGRICULTURE, 2004

Status of the Wisconsin Farm Economy

Situation and Outlook: Farm Products, Farm Inputs and the General Economy

Special Articles

- *The Rocky International Trade Situation: Implications for U.S. Agriculture*

- *The Evolution and Current Status of Livestock Production and Meat Processing in Wisconsin*

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
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And

Cooperative Extension
University of Wisconsin-Extension

PREFACE

Status of Wisconsin Agriculture is an annual agricultural situation and outlook report authored principally 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, commodity and market analysts review current conditions affecting Wisconsin agricultural sectors and offer their forecasts for 2004. Part III contains special articles dealing with longer-term issues facing Wisconsin agriculture.

Additional copies of this report may be purchased for $5, 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 the University of Wisconsin Center for Dairy Profitability and by generous contributors to the University of Wisconsin Foundation. We also wish to thank Robert Mitchell, Department of Life Sciences Communication, for his editorial and production assistance.

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January 2004

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SUMMARY

For Wisconsin dairy farmers, the year 2003 can be split into two equal parts: one lousy and one pretty darned good. Class III milk prices during the first six months of the year averaged $9.56 per hundredweight, $1.90 under the 1998-2002 average for the first six months of the year and 24 cents below the federal price support level. From July through December, the Class III price will average higher than $13.00, more than 50 cents per hundredweight above the five-year average price for the last six months of the year.

Stronger milk prices came about from sliding milk cow numbers and lackluster milk yields per cow. Higher slaughter prices and the National Milk Producers Federation CWT herd buyout program encouraged more aggressive culling by dairy farmers. Milk per cow was hurt by hot weather in the west and a sustained low milk-feed price ratio, which caused a rebalancing of dairy rations away from higher-priced feeds.

Cattle producers also saw escalating prices in the latter part of the year for two major reasons: (1) the popularity of the high-protein Atkins diet and (2) the finding of a BSE-infected cow in Alberta and related bans on Canadian meat and cattle imports to the United States. By October, choice cattle prices were more than $30 per hundredweight above year-earlier levels, and utility cows were $13 higher. High retail prices for beef led to some substitution of pork and chicken at the dinner table. Hog prices were pushed to near $50 per hundredweight by June before falling off due to expanded imports from Canada. Broiler prices stayed $5-$10 higher than last year from July through year-end. Even eggs hopped on the high-priced protein band wagon, with especially strong prices late in the year.

U.S. soybean growers harvested the second largest acreage on record, but due to widespread drought, experienced the lowest average yields in ten years. When the rain stopped, cash and futures prices started rising, occasionally breaking the $8.00 per bushel mark. The 2003 U.S. crop ended up at an estimated 2.45 million bushels, the lowest since 1996. Wisconsin growers harvested 28 percent fewer bushels of soybeans in 2003 although they harvested 12.5 percent more acres than in 2002.

Corn growers also experienced drought, but it came after the critical pollination period in most areas. In fact, the U.S. average corn yield was record high, as was total corn production. This will hold corn prices below last year's, which is particularly disappointing to Wisconsin corn growers, who, after lower yields and a smaller crop, have less to sell at lower prices.

We expect that final data for 2003 will show that Wisconsin farmers as a whole earned about $950 million in net farm income. This is up nearly 50 percent from 2002's depressed level but less than net earnings in 2001, the last year of good milk prices.

The agricultural outlook for 2004 is somewhat blurred by the December 2003 finding of a BSE-infected dairy cow in Washington. That discovery led 20 or more countries to ban U.S. beef imports. Exports to countries that imposed bans totaled about 8 percent of U.S. beef production in 2003.

If several more cases of BSE in the United States are uncovered, import bans will likely continue and U.S. consumers may begin to eschew beef. The resulting impact would be felt across virtually all agricultural markets. There would be some big losers, especially cattle producers, beef packers and retail and food service outlets specializing in beef. There would be some gainers, especially suppliers of meat and non-meat protein substitutes for beef. It is impossible to accurately predict either the aggregate effect or the effect on individual commodity sub-sectors.

More likely, the effects of the December 2003 BSE scare will be temperate and marginal. So far, the confidence of U.S. beef consumers does not appear to be shaken, and may be enhanced if the BSE incident spurs quick adoption of animal identification requirements and improvements in meat safety standards.

Since the outcome of more BSE disclosures cannot be predicted and since we believe that the impact of the isolated incident will be limited, market outlook analysts did not significantly alter their 2004 forecasts from those made before the BSE incident. Here's what they're saying:

- Expect 2004 milk prices to average $0.50 to $1.00 per hundredweight higher than 2003. But a more moderate price pattern is anticipated — lows will be around $2.00 higher than the depressed levels seen in early 2003 and highs will be $0.50 to $1.00 lower than those experienced in the second half of the year.

- Choice cattle, feeder cattle, and utility cow prices in 2004 should average near 2003 levels, but will not reach their 2003 highs. Hog prices are expected to average a little under $40 per hundredweight, on par with 2003. Poultry meat prices should show a slight gain.

- Last year's record corn crop will constrain corn prices in 2004 despite anticipated growth in exports and industrial use, especially for ethanol. Expect corn prices to average 10–12 cents per bushel under 2003. The very short 2003 U.S. soybean crop will yield firm prices for much of the year — USDA forecasts a season-average price of $7.25 per bushel. But new crop beans will be priced much lower assuming normal weather during the 2004 growing season.

- Fuel prices are expected to be 3–4 percent higher in 2004. Anhydrous ammonia will be at least as costly as last year, when prices shot up $100 per ton from 2002. Ag chemicals and seeds should be priced close to 2003 levels. Short- and long-term interest rates could rise as much as 1 percentage point.

- The U.S. economy (GNP) is expected to grow by 4–4.5 percent in 2004, but unemployment will likely remain high, and burgeoning budget deficits will discourage farm program spending. The U.S. dollar will remain weak, facilitating exports of U.S. farm goods.

Wisconsin net Farm income in 2004 should break the $1 billion mark, and could be as high as $1.2 billion. Most of the gain over 2003 will be from anticipated higher milk prices.

Wisconsin farmers' balance sheets improved again in 2003, and will show further improvement in 2004 because of rising farm real estate values. Recent gains in farmland prices are ominously similar to the large gains observed in the late 1970s and early 1980s. These earlier gains were followed by a collapse in farmland prices, leading to widespread financial stress and insolvency among Wisconsin farmers in the mid- to late-1980s. However, a reoccurrence of that crisis is not expected. The current round of farmland appreciation is being fueled not by farmers speculating on higher land values but by non-farm investors seeking recreational and rural residential property.

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Two special articles are contained in this year's report. One reviews the status of and future prospects for multilateral agricultural trade negotiations under the latest World Trade Organization round and some bilateral trade negotiations. The second article traces the evolution of the livestock and meat processing sectors of Wisconsin agriculture.

I. Status of the Wisconsin Farm Economy

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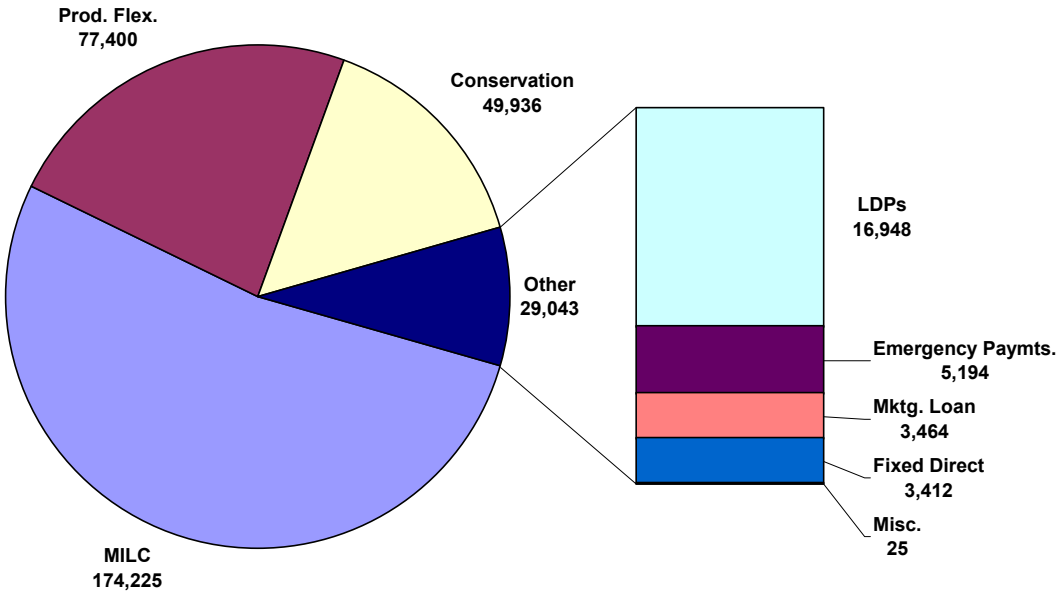
Wisconsin Farm Income

USDA estimated Wisconsin net farm income in 2002 at $640 million. This was about $370 million less than 2001 and $90 million under 2000 farm earnings. Lower farm income was attributable mainly to very low milk prices during all of 2002 — dairy income was down almost $600 million from 2001. Income from other livestock was off $120 million. Higher cash receipts from crops offset about $400 million of the reduced income from livestock sales.

Wisconsin farmers garnered $330 million in farm payments in 2002, compared to $415 million in 2001 and over $600 million in 2000. Loan deficiency payments, conservation payments, and emergency program payments were all down in 2002 compared to 2001. But Wisconsin dairy farmers received almost $174 million in Milk Income Loss Contract (MILC) payments in 2002, offsetting much of the reduction in crop payments.

Government Payments to Wisconsin Farmers, 2002
($1,000)



Derivation of Wisconsin Net Farm Income ($1,000)

		2001	2002	2003 Est.
	Value of crop production:			
	Food grains	28,550	38,040	50.000
	Feed crops	483,189	625,862	650,000
	Oil crops	153,705	213,181	260,000
	Fruits and tree nuts	82,984	128,267	200,000
	Vegetables	383,410	382,505	400,000
	All other crops	158,1941	162,751	170,000
	Home consumption	5,461	5,461	5,000
	Inventory adjustment	24,690	157,168	0
	Total Crops	1,320,1838	1,713,235	1,735,000
plus:	**Value of livestock production**:			
	Meat animals	839,680	745,612	850,000
	Dairy products	3,244,752	2,662,650	2,870,000
	Poultry and eggs	250,375	220,931	255,000
	Miscellaneous livestock	136,024	139,109	140,000
	Home consumption	16,528	15,584	17,000
	Value of inventory adjustment 2/	(53,532)	(2,432)	0
	Total Livestock	4,427,927	3,781,454	4,132,000
plus:	**Revenues from services and forestry:**			
	Machine hire and custom work	94,619	57,119	60,000
	Forest products sold	151,682	151,700	150,000
	Other farm income	261,247	178,062	190,000
	Gross imputed rental value of farm dwellings	507,559	492,692	500,000
	Total	1,015,107	879,573	900,000
equals	**Value of agricultural sector production**	6,769,117	6,374,262	6,767,000
less:	**Purchased inputs:**			
	Farm origin	1,105,703	1,119,541	1,200,000
	Manufactured inputs	818,713	794,365	870,000
	Other purchased inputs	1,652,595	1,515,351	1,570,000
	Total	3,547,011	3,429,257	3,640,000
plus:	**Government transactions:**			
+	Direct Government payments	415,110	330,604	550,000
-	Motor vehicle registration and licensing fees	14,455	12,600	15,000
-	Property taxes	349,192	341,841	350,000
	Total	51,463	(23,837)	185,000
equals	**Gross value added**	3,273,569	2,921,169	3,312,000
less:	**Depreciation**	968,075	998,404	1,000,000
equals	**Net value added**	2,305,494	1,922,765	2,312,000
less:	**Payments to stakeholders**			
	Employee compensation (total hired labor)	621,485	640,585	685,000
	Net rent received by non-operator landlords	194,553	193,526	220,000
	Real estate and non-real estate interest	479,751	448,526	455,000
	Total	1,295,789	1,282,637	1,360,000
equals	**Net farm income**	1,009,705	640,128	952,000

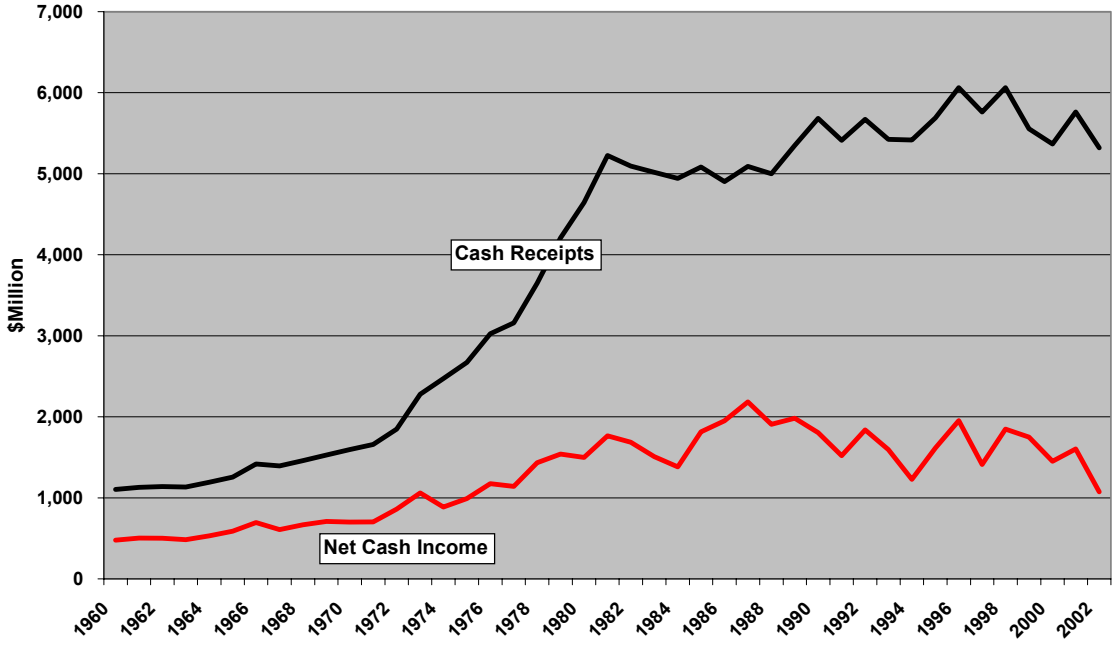
Source: Economic Research Service, USDA. 2003 is forecast by the authors.

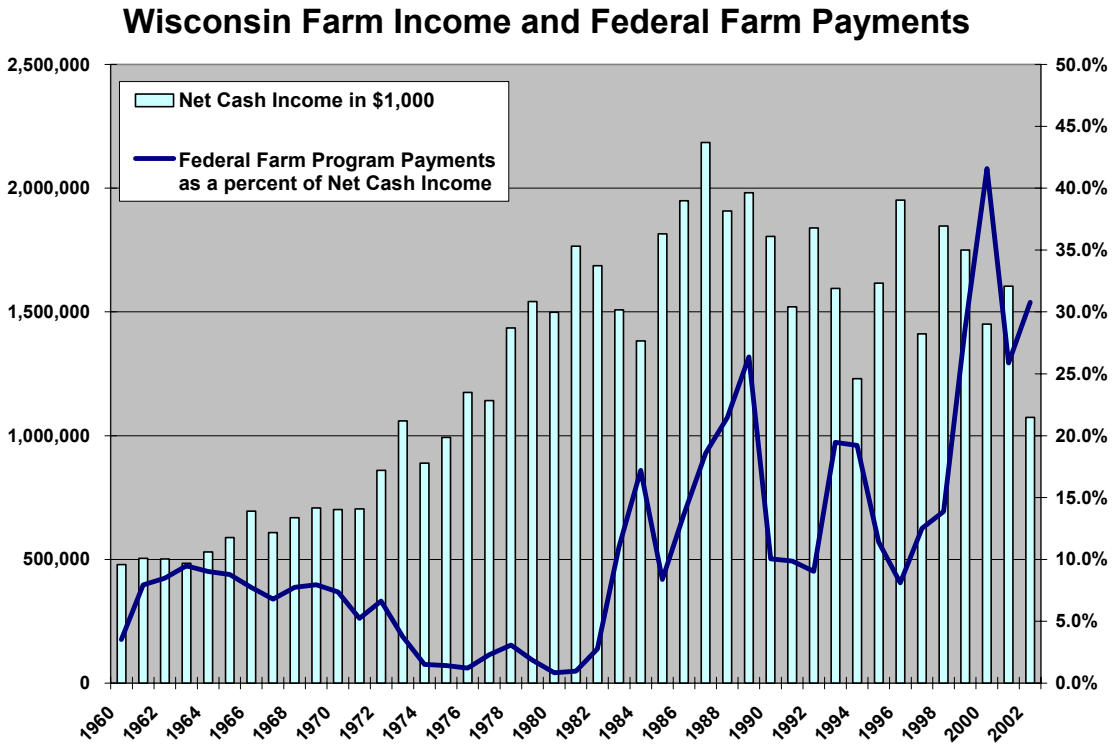
USDA will not release 2003 state income numbers until mid-2004. Our estimate, based on USDA's national farm income forecasts and Wisconsin's mix of agricultural commodities, is about $950 million. The gain in 2003 crop income over 2002 is forecast at about $20 million, due principally to stronger markets for soybeans and fruit crops. Income derived from livestock products is expected to be up $350 million, mainly from higher milk and cattle prices. Government payments in 2003 are estimated at about $550 million, about 40 percent of this total from MILC payments.

Farm expenses in 2002 were down about $120 million from the previous year, due in large part to lower maintenance and repair costs. This suggests that farmers delayed some necessary upkeep. Forecast input costs in 2003 are expected to be about $3.6 billion, up $200 million over 2002.

After enjoying large increases in sales and net income during the 1970s and into the early 1980s, Wisconsin farmers have seen farm returns stagnate. Cash receipts from farm marketings rose from less than $2 billion in 1972 to more than $5 billion in 1981. Since then, sales from Wisconsin farm goods have varied between $5 billion and $6 billion. Wisconsin net cash income from farming peaked at $2.2 billion in 1987. Net cash income in 2002 was less than half the 1987 level.

Wisconsin Farm Income: Cash Receipts from Farm Marketings versus Net Cash Income





As cash receipts from farming have stagnated and net cash income has fallen, government payments have become a larger part of Wisconsin farmers' incomes. From 1960 through 1982, farm program payments were consistently less than 10 percent of net cash income. Since then, there have been only three years when such payments were less than 10 percent. Since 1999, farm program benefits have averaged about a third of net cash income.

Farm Balance Sheet

Despite a drop in net farm income, the aggregate balance sheet of Wisconsin farmers' strengthened in 2002. The value of total assets rose by about $2.5 billion while total debt rose about $250 million, yielding a net increase in total farm equity of $2.2 billion.

Wisconsin farmers' gain in wealth in the face of falling farm income comes from appreciating farmland values. Between 2001 and 2002, the value of farm real estate rose by almost $2.5 billion. Balanced against small positive and negative changes in the value of other assets, the gain in real estate value accounts for all of the increase in assets.

From 1998 through 2002, farm debts have risen almost $1 billion. About 60 percent of this increase reflects higher real estate debt. An increase in farm debt is not surprising in light of generally low farm income during this period.

Wisconsin Farm Business Balance Sheet (In $1,000), December 31, 1998-2002					
	1998	*1999*	*2000*	*2001*	*2002*
Farm assets					
Real estate	18,092,265	22,312,524	26,087,991	27,696,210	30,187,532
Livestock and poultry	2,866,996	3,217,654	3,045,446	3,624,500	3,324,920
Machinery and motor vehicles	3,730,807	3,732,618	3,730,927	3,871,447	3,910,669
Crops	1,147,081	1,022,401	854,243	760,874	917,642
Purchased inputs	281,746	225,202	273,875	235,648	315,063
Financial	1,806,138	1,895,118	2,072,731	2,117,090	2,124,493
Total Assets	27,925,032	32,405,516	36,065,214	38,305,768	40,780,320
Farm debt					
Real estate					
Farm Credit System	710,613	745,857	765,891	847,468	975,427
Farm Service Agency	99,047	92,466	88,740	87,251	82,906
Commercial banks	1,110,988	1,216,193	1,312,246	1,370,682	1,457,895
Life insurance companies	71,713	76,692	70,345	71,312	72,684
Individuals and others	660,957	659,673	652,957	665,519	679,234
Subtotal	2,653,318	2,790,881	2,890,177	3,042,232	3,268,146
Nonreal estate					
Farm Credit System	810,909	770,791	852,372	982,217	1,008,048
Farm Service Agency	158,158	163,548	164,411	166,266	159,138
Commercial banks	1,318,685	1,292,541	1,402,013	1,407,354	1,386,052
Individuals and others	606,764	628,001	673,851	690,399	710,321
Subtotal	2,894,517	2,854,881	3,092,647	3,246,236	3,263,559
Total Debt	5,547,836	5,645,763	5,982,824	6,288,468	6,531,705
Equity	22,377,197	26,759,753	30,082,390	32,017,300	34,248,614

Worth noting with respect to Wisconsin farmers' increasing indebtedness is where they are getting credit. Commercial banks have expanded their real estate lending while holding their non-real estate lending fairly constant. Farm Credit System (FCS) lenders have increased both their real estate and non-real estate loan volume. Commercial banks increased their share of Wisconsin farm real estate debt from 41.8 percent to 44.6 percent between 1998 and 2002. During the same period, they decreased their share of non-real estate debt from 45.6 percent to 42.5 percent.

The strong balance sheet position of Wisconsin farmers suggests that most of them have enough collateral to secure loans in the near future. However ample collateral does not mean that credit is going to be readily accessible. Because of their low earnings in recent years, farmers may not be able to meet lenders' annual repayment requirements. Some of them could be facing serious credit problems in the near future if farm incomes do not rebound.

II. Current Outlook: Wisconsin Agricultural Commodities and Inputs and the General Economy

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. Forecasts for the general economy are also offered. Interested readers are encouraged to contact these specialists for more current or more detailed information.

Dairy

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2003 in Review

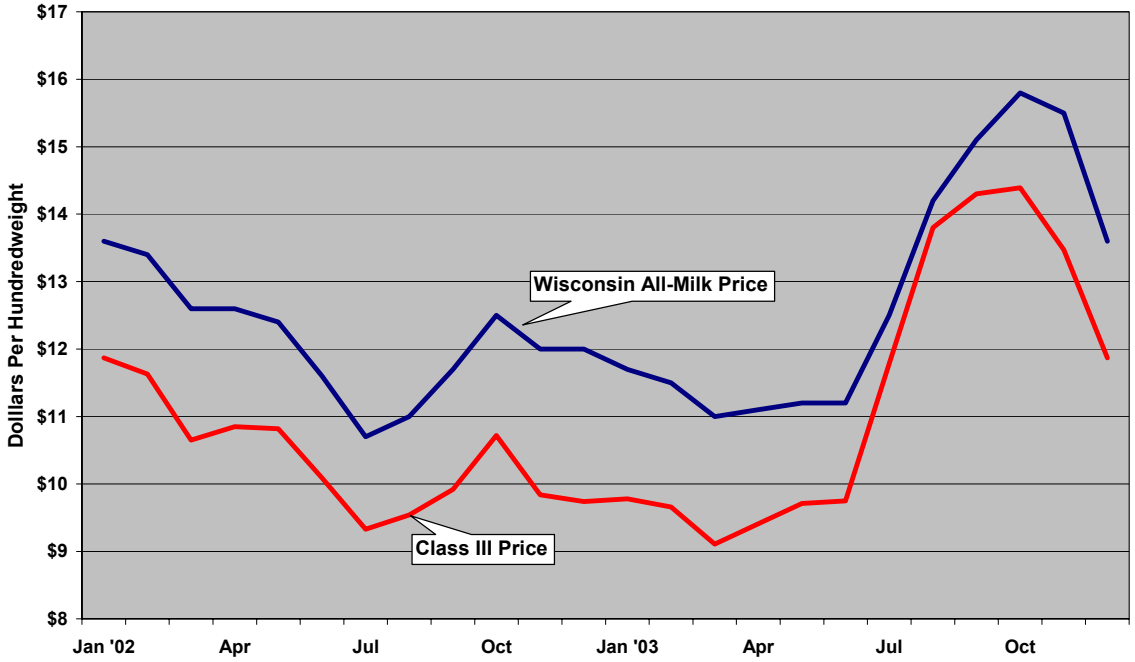
After being depressed — below $11.00 and even $10.00 per hundredweight for 16 months (March 2002 – June 2003) — the Class III price began a sharp rise in July 2003. The Class III price was $11.78 per hundredweight in July, $2.03 higher than July 2002, and peaked at $14.39 in October before falling seasonally to $13.47 in November and $11.87 in December.

With the much improved milk prices for the second half of the year, the average Class III price for 2003 was $11.42 and the Wisconsin All-Milk price will be an estimated $13.00 per hundredweight. This compares to $10.42 and $12.18 per hundredweight, respectively, for 2002.

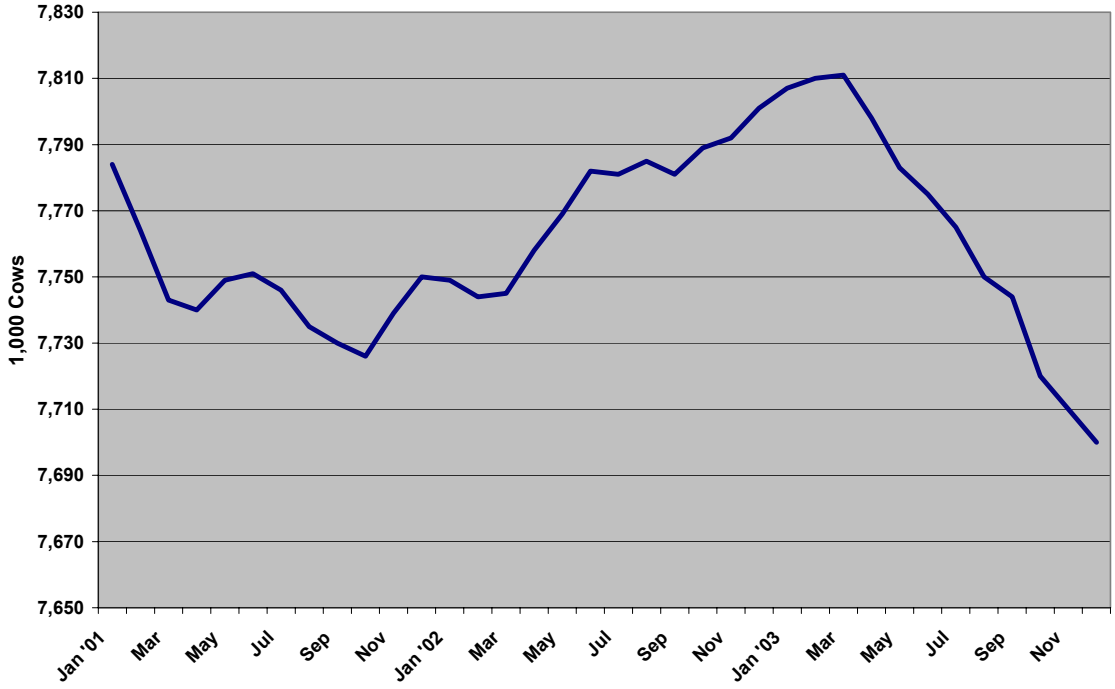
The improvement in milk prices was triggered by a decrease in U.S. milk cow numbers. When milk cow numbers are increasing, milk prices are normally depressed. Milk cow numbers for the 20 reporting states increased from November 2001 through March 2003, and then declined from April through November. U.S. milk cow numbers will end the year near 9 million head, about 1.6 percent below the previous December, and average about 9.09 million head for the entire year, down 0.6 percent from 2002.

The drop in cow numbers was encouraged by a relatively high cull cow price. The price of cull cows has been strong at $52–58 per hundredweight, well above the $34–43 experienced a year ago. As a result, slaughter of milk cows totaled 276,000 head in October, the highest monthly slaughter since January 1997. This high October slaughter included about 33,000 milk cows slaughtered under the National Milk Producers Federation's CWT program. From January through the week ending November 15, milk cow slaughter was almost 11 percent higher than for the same time period a year ago.

Class III Price & Wisconsin All-Milk Price, 2002-2003



Milk Cows, 20 States



A second reason for improved milk prices was relatively poor milk yields. The average annual increase in milk per cow is about 2 percent. But during 2003, monthly milk per cow was often below 2002 levels. For the year, milk per cow is expected to increase only about 0.5 percent to an average of about 18,670 pounds.

This relatively poor cow performance is due in part to unfavorable summer weather, particularly in the West. Further, in the wake of a long period of low milk prices, many dairy operators lacked either the incentive or the means to replace older, less productive cows. At the same time, the supply of replacements was tighter due to a ban on replacements from Canada and a smaller U.S. heifer supply. The July 1 inventory of dairy replacements was 3 percent lower than the year before and averaged just 39.6 per 100 milk cows compared to the 43–45 per 100 milk cows experienced for the past three years.

With milk per cow up 0.5 percent and cow numbers averaging 0.6 percent lower, total milk production for 2003 is estimated at 169.7 billion pounds, the same as 2002

With no change in milk production, one might have expected that milk prices would have increased even more in 2003. In fact, price increases were dampened by relatively sluggish sales of dairy products, particularly cheese. From 1985 through 2000, commercial disappearance of all milk and dairy products increased at an annual rate of more than 2 percent. But slow sales, particularly cheese sales, reduced this growth to just 0.4 percent for 2001 and 0.5 percent for 2002. Part of this can be blamed on a slower-growing economy and a loss of consumer confidence. There were indications that sales were improving for the 4th quarter of 2003.

The blame for low milk prices is frequently placed on dairy imports. While dairy imports do add to the domestic milk supply, they have a relatively minor impact at the farm level. Much attention is directed at an increase in imports of casein and other milk protein concentrates (MPC). While these imports were up in 2003, their impact on farm milk prices is minimized by the federal dairy price support program, which stands ready to purchase surplus nonfat dry milk. Milk Protein Concentrate and casein imports replace the use of domestic nonfat dry milk, adding to the cost of the price support program. But, most of the change in farm level milk prices can be attributed to domestic milk production and consumption, not imports.

In Wisconsin, the long decline in milk cow numbers slowed in 2003. The average number of milk cows declined about 1.6 percent from 2001 to 2002, but only about 1.1 percent from 2002 to 2003. The estimated average number of milk cows on Wisconsin farms in 2003 was about 1.257 million head.

Unlike the nation as a whole, Wisconsin's milk yield improved in 2003. In 2002 Wisconsin milk per cow averaged 17,370 pounds, up only 1.1 percent from 2001. In 2003 it will likely average 17,720 pounds, about a 2 percent annual gain. Total Wisconsin milk production fell 0.6 percent in 2002, to 22.1 billion pounds. Milk production

in 2003 will end up around 22.3 billion pounds — close to 1 percent above 2002.

Outlook for 2004

Several market factors suggest that milk prices in 2004 will average higher than 2003, particularly in the first half of the year.

First, cow numbers will likely continue to decline and remain below year-ago levels until the end of 2004. Since many farmers have seen their equity erode, they will find it more difficult to obtain credit. Therefore, dairy herd expansions are not likely to increase until the end of the year. The tighter supply and higher prices of dairy replacements will also slow expansions.

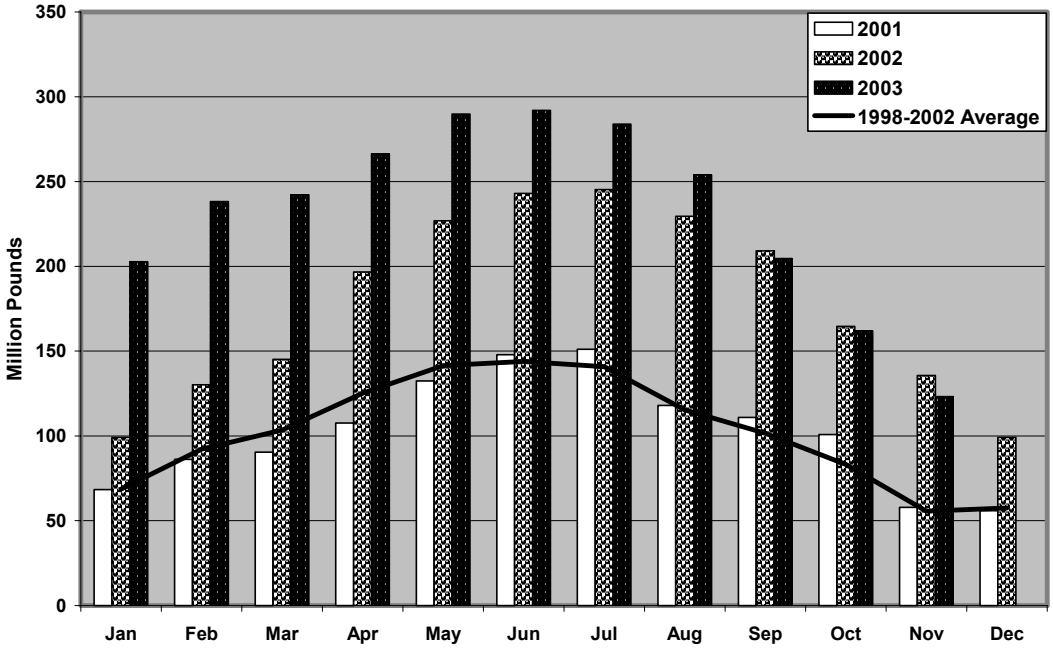
Second, milk per cow is likely to increase less than 2 percent for the first half of the year. This is below the long-term trend. With the tighter supply of replacements, producers may continue to keep older and lower-producing cows longer. The milk-feed price ratio, while improved, may not provide an incentive to feed for higher milk production. The milk-feed price ratio compares the price of a pound of whole milk to the price of 16 percent protein mixed dairy feed consisting of 51 pounds of corn, 8 pounds of soybeans and 41 pounds of alfalfa. A milk-feed price ratio well above 3.0 is usually required to encourage feeding for higher milk per cow. The ratio was below 3.0 from February through August of 2003. It improved to as high as 3.24 for October before backing off to 3.09 for November. Lower milk prices and higher feed costs will keep downward pressure on the milk-feed price ratio in early 2004. Grain and soybean prices are higher than a year ago, and soybean prices are expected to stay much higher until at least late spring.

Alfalfa hay prices are close to year-earlier levels in most reporting markets, but good-quality alfalfa hay prices are expected to increase substantially as winter progresses. U.S. alfalfa hay production was up 6.4 percent from 2002, but it was down 4 percent in Idaho, down 6 percent in California and down more than 20 percent in Wisconsin and Minnesota. While production is up more than 20 percent in the Northeast, quality is poor. More hay will be available from the Dakotas, where production was up about 50 percent. But, overall the supply of high-quality alfalfa will be tight this winter. The quality of corn silage is also highly variable in the Midwest.

A decrease in dairy stocks is another positive factor for milk prices. November 30 stocks of butter stood at 123.2 million pounds, 9 percent less than a year ago and down more than 57 percent from the reported 290 pounds in June. Butter stocks remain ample, with November 30 stocks more than 55 percent above the five-year November average. But the situation is much improved from June, when stocks were almost 1.5 times the five-year average. Respectable sales and decreased butter production have combined to reduce stocks.

October butter production was 5.5 percent below year-ago levels. Production was 7.7 percent lower for the January-through-October period. Lower production has required a draw-down in stocks to satisfy use. Butter prices have strengthened as a result. Butter prices (CME) peaked at $1.485 per pound in mid-December before falling off later in the year. If butter stocks continue to shrink, by late summer and fall prices could climb to the $1.50 to $2.00 per-pound range.

Total U.S. Butter Stocks, 2001-2003

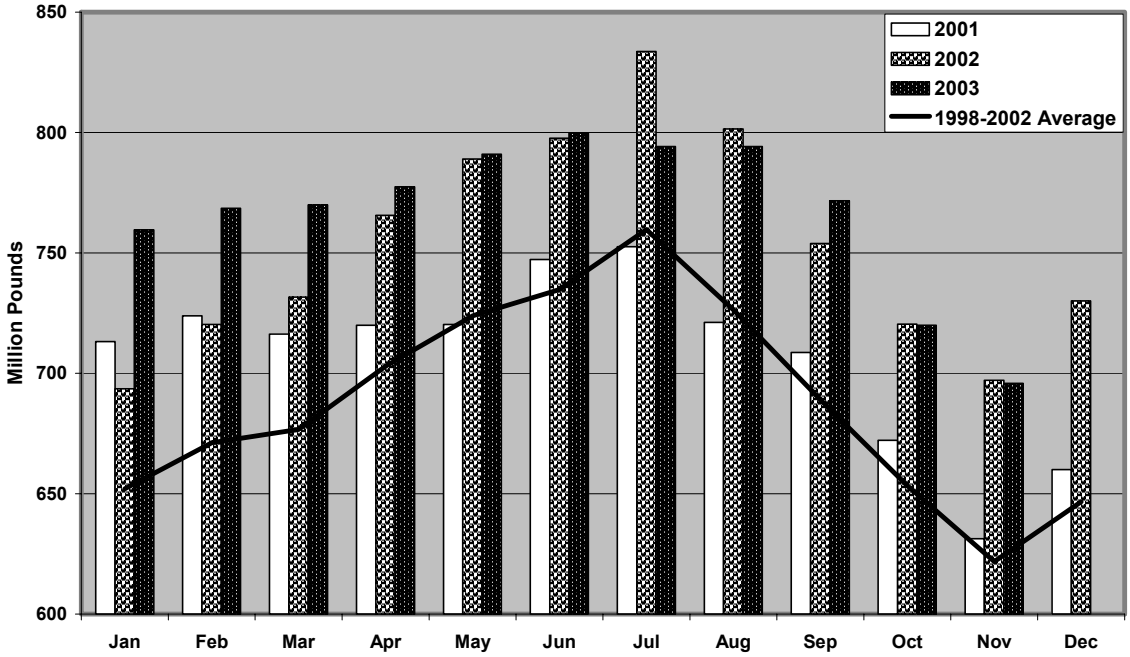


The situation with cheese stocks has also improved. Compared to a year ago, November 30 stocks of natural cheese were down slightly and just 12 percent above the five-year average for November. In January, natural cheese stocks were almost 17 percent over the five-year average for the month. But, unlike butter, cheese production is up some from a year ago. Total cheese production for October was 1 percent higher than last October with the production of American type cheese up 1.6 percent and the production of Italian cheeses down 0.6 percent. The higher cheese prices relative to butter and milk powder appear to have drawn additional milk into the production of cheese. For the January through October period, total cheese production was up 0.5 percent, while production of butter was down 7.7 percent and production of nonfat dry milk was down 6.1 percent.

Another key factor for better milk prices in 2004 is an expected improvement in commercial disappearance. For January through October 2003, commercial disappearance on a milk equivalent-butterfat basis was 1.5 percent higher than a year ago. But on a product pound basis, butter was down 1.5 percent,

American cheese down 0.6 percent, and fluid (beverage) milk down 0.3 percent. The only real bright spot was sales of cheese varieties other than American (mostly Italian types), which were up 2.3 percent. This is encouraging since most of the Italian types are consumed in restaurants and other food service outlets. It is now estimated that commercial disappearance for 2003 could total near 173.4 billion pounds of milk equivalent, up about 1.7 percent from 2002.

Total U.S. Cheese Stocks, 2001-2003



A stronger economy and improved consumer confidence point to a continued improvement in disappearance. Gross domestic product rose 8.2 percent for 3rd quarter of 2003, the quickest pace since the end of 1984. The Consumer Confidence Index rose to 81.1 in October, up from 77 in September. The restaurant performance index increased in six of the last eight months. For the first time in 17 months, a majority of restaurant operators reported a same-store sales gain for October, and 46 percent reported an increase in customer traffic. This is important because restaurant and other food services are major outlets for both butter and cheese.

In summary, milk production and consumption projections for 2004 suggest that average milk prices will very likely be higher than in 2003, especially for the first half of the year. U.S. milk cow numbers will probably continue to decline to an average of about 9.03 million head, 0.5 percent lower than in 2003. Milk per cow should improve during the year to average about 19,000 pounds, up 1.8 percent from 2003. This would put 2004 U.S. milk production around 171.6 billion pounds,

1.1 percent higher than 2003. Weather and crop conditions next summer can change these estimates substantially. Favorable weather, for example, could improve milk per cow by more than 1.8 percent, resulting in more total milk production.

Where commercial disappearance ends up in 2004 is quite uncertain, but it seems to be improving. A growth of about 1.75 percent appears to be a reasonable estimate. This would put 2004 commercial disappearance near 173.4 billion pounds.

Wisconsin cow numbers are likely to decline significantly in 2004, probably more than 1 percent. When milk prices are higher, milk cows usually sell for more. Corn and hay prices will also be higher. The combination of higher milk cow prices and higher feed prices may encourage those producers who plan on retiring soon to sell out in 2004. Not all of the milk cows sold will end up on another dairy farm — the poorer cows will be slaughtered. But if the increase in milk per cow is near the long-term trend of 2 percent per year, this would more than offset the decline in cow numbers and Wisconsin could see milk production grow by nearly 1 percent for the second consecutive year.

Average cow numbers, milk per cow, total milk production, and commercial disappearance, estimated 2003 and projected 2004, U.S. and Wisconsin

	United States	*Wisconsin*
Average cow numbers (million head)		
2003	9.08	1.257
2004	9.03	1.243
Change	- 0.5%	-1.2%
Average milk per cow (pounds)		
2003	18,670	17,720
2004	19,000	18,075
Change	+1.8%	+2.0%
Total milk production (Billion Pounds)		
2003	169.7	22.275
2004	171.6	22.470
Change	+1.1%	+0.9%
Commercial disappearance (Billion Pounds)		
2003	173.4	
2004	176.4	
Change	+1.75%	

Source: Author's estimates.

Cheese, butter, nonfat dry milk and dry whey prices drive what dairy producers get paid for milk components (butterfat, protein and other solids not fat). These component values also determine the base Class III price. Estimates for commodity prices by quarter show much stronger prices than experienced during the first half of 2003.

Projected quarterly average wholesale prices for 40-pound cheddar cheese, butter, nonfat dry milk and dry whey, 2004

Quarter	*Cheese*	*Butter*	*Nonfat dry milk*	*Dry whey*
		----------$/Lb.----------		
Jan. – Mar.	$1.28 - $1.30	$1.15 - $1.20	$0.81	$0.19
Apr. – Jun.	$1.30 - $1.35	$1.20 - $1.30	$0.81	$0.19
Jul. – Sept.	$1.40 - $1.50	$1.40 - $1.80	$0.81	$0.20
Oct.- Dec.	$1.45 - $1.30	$1.80 - $1.35	$0.81	$0.20

Author's forecast. Ranges reflect prices at beginning and end of quarter

With anticipated improvements in milk per cow and a slower decline in cow numbers for the second half of the year, milk prices — while still relatively good — are not expected to reach 2003 levels. On average, Class III prices for 2004 will average about $12.00 to $12.20 per hundredweight compared to $11.42 for 2003. Wisconsin's average all-milk price is projected at $13.50 to $13.70 per hundredweight for 2004, compared to the estimated $13.00 average in 2003.

For months when the price mover for Class I milk is less than $13.69 per hundredweight, dairy producers are paid 45 percent of the difference though Milk Income Loss Contract (MILC) payments. MILC payments are limited to 2.4 million pounds of milk produced during the October through September period. During 2003, MILC payments were made from January through August. These payments per hundredweight started the year at $1.4085, peaked in June at $1.8225 and then declined to $1.2240 for August. There were no MILC payments September through December because the Class I mover was above $13.69. MILC payments in 2004 are likely for some months of each quarter, with payments the highest from January through June.

Milk prices are highly volatile and can change more than a $1.00 per hundredweight very quickly as new market information becomes available. Price estimates based on current information become out of date. Market fundamentals tell us where milk prices seem to be headed and can help in making decisions about dairy price risk management and other business matters. But remember that price forecasts change with new information, and marketing plans must changed accordingly.

Forecast for Class III prices, Wisconsin average all-milk price and Milk Income Loss Contract Payments by quarter for 2004 (Dollars per Hundredweight)

Quarter	*2003*	*2004 Forecast*	*2004 MILC Payments*
Jan.	$9.78		
Feb.	$9.66	$11.35 - $11.60	$1.05 - $0.95
Mar.	$9.11		
Apr.	$9.41		
May	$9.71	$11.60 - $12.10	$0.95 - $0.70
Jun.	$9.75		
Jul.	$11.78		
Aug.	$13.80	$12.65 - $13.80	$0.45 - $0.00
Sept.	$14.30		
Oct.	$14.39		
Nov.	$13.47	$13.30 - $11.70	$0.15 - $0.90
Dec.	$11.87		
Average Class III	$11.42	$12.00 - $12.20	
Average all-milk price	$13.00 (estimate)	$13.50 - $13.70	

Source: 2003 actual prices from USDA, Dairy Market News; estimates and forecasts are author's. For 2004, the first number is for the beginning of and the last number the end of the quarter.

To this end, it is useful to monitor factors that change price forecasts — cow numbers, milk per cow, stocks of dairy products, commercial sales and anticipated weather and crop conditions. The dairy futures market responds to these factors. Dairy producers should consider them when making decisions as whether to protect future milk prices by using risk management tools such as hedging, buying put options or contracting with a milk buyer. Seldom do prices turn out exactly as forecast.

BSE and Dairy

The effect of the BSE finding in Washington on the dairy sector is expected to be minimal. There is ample scientific evidence demonstrating that prions from BSE-infected cows are not transmitted to milk. If beef demand falls due to the BSE scare, the principal dairy consumption effect would be felt in cheese, and that effect is ambiguous — process cheese demand would be negatively affected by less use for cheeseburgers and other beef-related fast food restaurant menu items but positively affected by consumers shifting to natural cheese as a protein substitute for beef. The principal supply-side effect from the BSE scare would be diminished culling due to lower cull cow prices. This could slow the falloff in dairy cow numbers that is expected in 2004, putting downward pressure on milk prices.

Livestock and Poultry

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Meat and livestock producers will view 2003 as two very different parts. On May 20, Canada reported the discovery that a cow slaughtered in January had tested positive for BSE (Bovine Spongiform Encephalopathy). In some countries, meat consumed from such animals is believed to have caused a fatal disease in humans. In recent years, BSE infected animals have been discovered in Europe, particularly in England, and in Japan, but the Canadian case was the first discovered in the Western Hemisphere. The economic ramifications for the meat industry were considerable, since 6 percent to 7 percent of the beef consumed here comes from Canada.

The importation of ruminate animals and meat from ruminate animals from Canada was immediately halted. The very important U.S. market was lost to Canadian cattle and beef producers until September and remained partially restricted for the rest of the year. Cattle and beef prices rose in the United States and fell in Canada. Low beef prices also forced down Canadian hog and pork prices, so that Canadian exports of hogs and pork to the United States rose. The higher U.S. beef prices spurred consumer demand for beef substitutes — broilers, pork and turkey. The net effect was higher prices for cattle, beef and broilers. The net effect on hogs and pork was mixed. The higher beef prices boosted the demand and price for pork but the additional exports from Canada increased U.S. pork supplies and put downward pressure on pork prices.

U.S. Meat Production Flat in 2003

U.S. meat production rose for 20 consecutive years from 1983 through 2002, increasing 64 percent during those two decades. Broiler output rose 168 percent, turkey production increased 132 percent, pork production rose 39 percent and beef output increased 21 percent. Of the total increase in meat production, broiler production accounted for over 60 percent, turkey output accounted for a little less than 10 percent, pork production accounted for more than 16 percent beef amounted to14 percent. Veal and lamb declined during the two decades.

When total meat output for 2003 is added up, we may find that U.S. meat production failed to exceed year-earlier levels for the first time since 1982. Beef output was down about 3 percent for the year. Almost all of the decline came in the fourth quarter, when production was 11 percent below the last quarter of 2002, the largest such year-over-year decline for any quarter in 24 years. Most of the decline in beef output during the year was caused by a much lower average weight of cattle slaughtered. Broiler production was up a little more than 1 percent, the smallest annual increase since a 1.1 percent gain in 1982. The output of both pork and turkey was about the same as in 2002.

Demand Strong, Meat Prices Higher in 2003

Animal, poultry and meat prices were higher during 2003, thanks to strong consumer demand and a smaller than expected supply of meat — mostly a result of the May 20 ban on Canadian cattle and beef. The average price of choice steers increased about 25 percent, or about $17.00 per cwt., to set a new record high, easily erasing the previous record set in 1990. Broiler prices averaged 11 percent higher in 2003, reaching the second highest annual average price ever (it was less than 2 percent below the record high set in 1998). Hog prices were up about 12 percent and above the average for three of the last five years. However, they were still lower than the annual average for almost every year from 1975 through 1997. This probably reflects the industrialization of the hog-producing industry and reduced cost of production over the past quarter century. Turkey prices were mixed with whole bird prices up a little but breast meat prices down. A large frozen turkey inventory early in the year depressed turkey prices before a vigorous rally took place later in the year.

Consumer demand for meat should improve a bit again in 2004 if employment and consumer incomes improve as expected. In addition, total U.S. meat production is unlikely to increase much with modest increases in poultry and pork output offset by a mild decline in beef production.

However, retail prices during the last half of 2003 were rising much faster than consumer incomes. This may lead to resistance in 2004, as consumers try to balance food expenditures against other rising costs such as health care and other services. If such resistance occurs, 2004 prices are unlikely to exceed the high prices achieved in late 2003, particularly for choice cattle. On the positive side, frozen inventories for beef, pork, broilers and turkey are all lower than a year ago and should not exert as much downward pressure on prices in the new year.

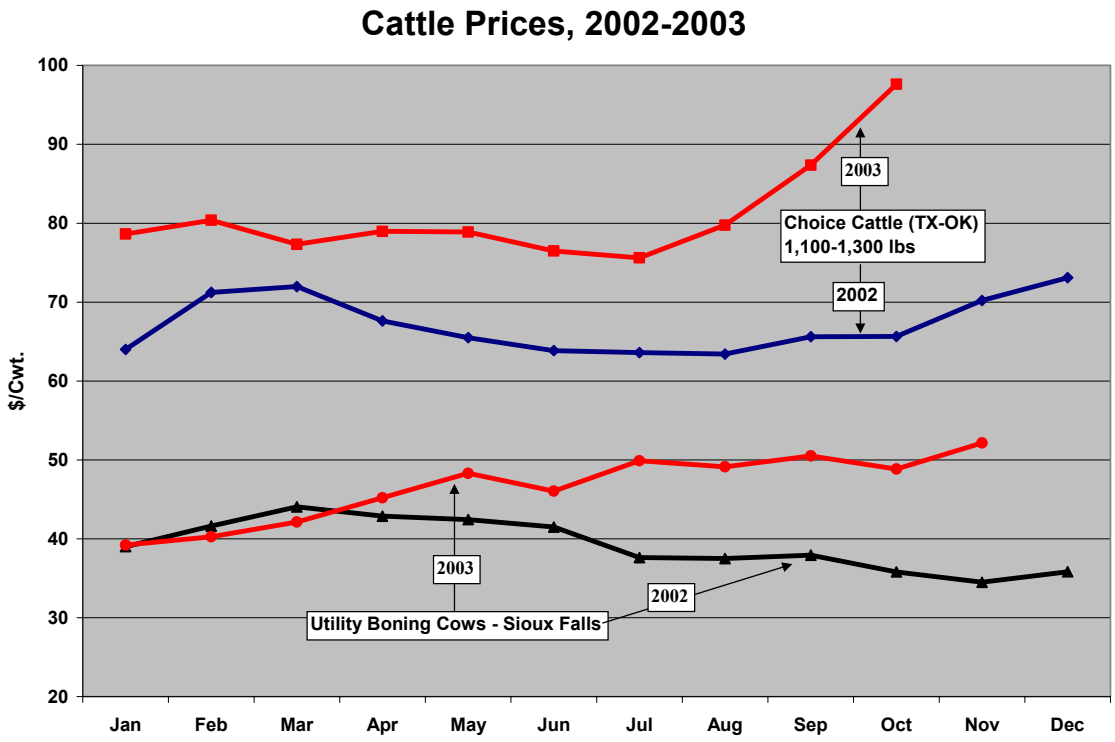
Feed costs are higher than a year ago. Despite a record large corn crop, corn prices are near year-ago levels as we enter the new year. However, the smallest U.S. soybean crop in seven years, a weakening U.S. dollar and strong worldwide demand for meal have led to much higher soybean meal prices late in 2003. Should these conditions persist into 2004, they would tend to inhibit production increases, particularly in poultry and pork.

Much depends on how the BSE situation unfolds. The finding of BSE cows in Canada, Japan and the United States in 2003 is a reminder that developments in food safety in the meat industry will remain an important factor in the industry outlook.

Cattle Prices Remain Strong in 2004

2004 choice cattle prices are likely to average near the 2003 level but show a more normal monthly pattern than occurred in 2003 when prices exploded to an October high. The price difference between choice and select grades, which was at a record level during much of 2003, should retreat back toward a more normal spread.

The annual average price of feeder steers should remain high — near or a little above the 2003 average — but probably below the fourth quarter 2003 record high. Feeder steer prices at Oklahoma City averaged near $90.00 per cwt., a record high and more than 12 percent higher than in 2002. Another record high is possible in 2004 unless a poor grain crop forces feed costs higher and restricts the amount that feed lots can pay for feeders.



Average Cow Prices Likely Higher in 2004; Reduced Supply Expected

Cow prices rallied in 2003 from depressed levels throughout 2002. Very strong demand and smaller frozen boneless beef inventories more than offset the impact of increased U.S. slaughter of cows to push prices higher. Boning utility cow prices at Sioux Falls in November 2003 were more than 50 percent higher than a year earlier and were the highest for any month in more than 12 years. The average price for 2003 was up 19 percent from 2002 and the highest since 1993.

These higher prices for cows were attained despite a 6 percent increase in U.S. cow slaughter. Dairy cow slaughter was up more than 9 percent as milk producers culled herds in response to lower milk prices and higher feed costs. The number of dairy cows slaughtered was the largest in six years.

The slaughter of beef cows was up about 2 percent and was the largest in five years. Continued serious drought in

much of the western half of the nation caused some further liquidation of the beef cattle herd. Total U.S. cow slaughter in 2003 was the largest in six years.

Cow slaughter is expected to be smaller in 2004, paving the way for continued favorable prices for cows. However, the seasonal trend is likely to be far different from 2003, when cow prices rallied vigorously during the entire year. The late-2003 price peak may not be matched or exceeded during much of 2004.

No Large Changes Seen in Hog Prices or Supply in 2004

The ban on Canadian beef and cattle for part of 2003 had a mixed impact on the pork industry. The rapid rise in U.S. beef prices helped lift pork and hog prices. However, the unexpected abundance of cattle and beef in Canada drove down both beef and pork prices there and raised the amount of pork and the number of slaughter hogs and feeder pigs exported to the United States. An unexpectedly large fourth quarter U.S. hog slaughter also kept the lid on hog prices late in the year.

The September 1 USDA survey of hog producers reported 2 percent fewer hogs on farms kept for market, including feeder pigs from Canada. However, October and November slaughter was up 3 percent. The number of hogs kept for breeding was reported to be a record low, down 3 percent from a year earlier. With the recent high productivity achieved in the hog industry, it is likely that 2004 pork production will approach that of 2003 despite the lower September inventory numbers.

The annual average difference between choice cattle and hog prices in 2003, about $44.00 per cwt., easily beat the old record difference ($35.00, set in 1999). The average spread between choice steer and hog prices for the last 10 years was only $25.34. At least two important questions remain as we enter 2004: Can pork demand be helped by strong beef prices and narrow the extremely wide cattle-hog price spread (nearly $60.00 per cwt. in the fourth quarter of 2003)? And will the unexplained large hog slaughter of the fourth quarter of 2003 persist into the new year?

With these questions remaining unanswered, average hog prices in 2004 will likely be near the 2003 figure of just under $40.00 per cwt. (live weight).

Wisconsin's decades-long decline in hog numbers appeared to stall in 2003. The September 1 survey showed an increase of 9 percent from a year earlier in the number of hogs kept for breeding on Wisconsin farms and an increase of 4 percent in the number kept for market.

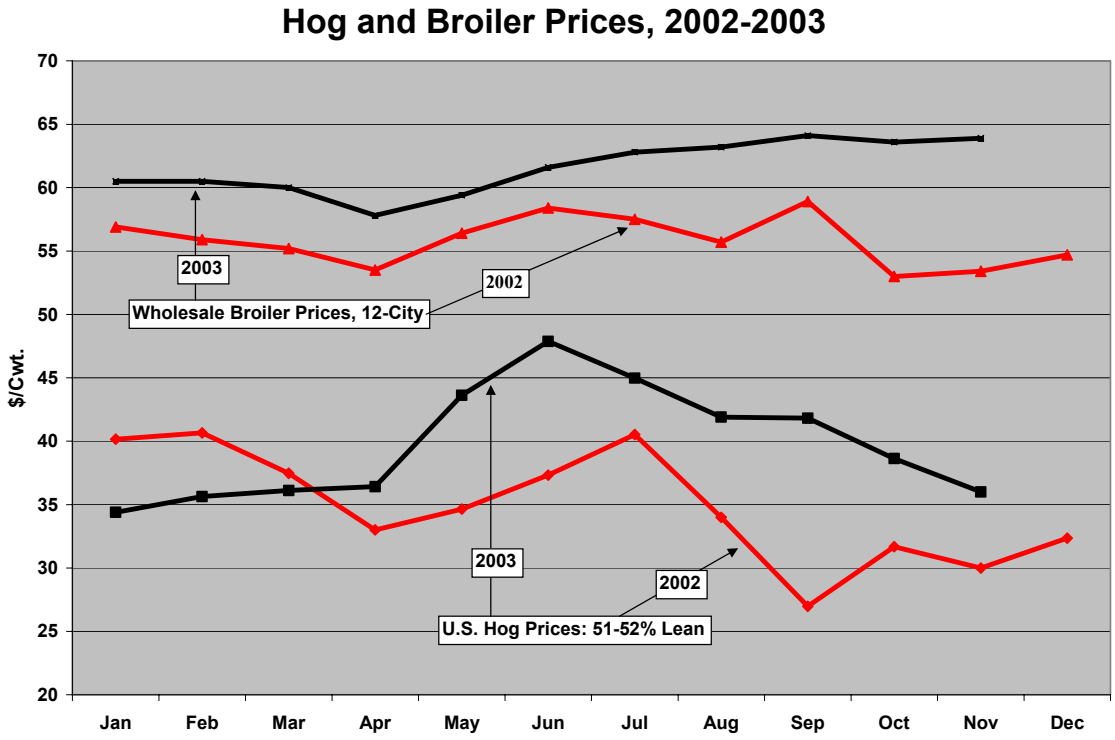
Broiler Output Continues Slow Rise

Broiler production rose about 1 percent in 2003, setting a new record high for the 29th consecutive year. However, the increase was the smallest in 21 years.

Continued strong demand, possibly helped by rapidly rising beef prices, yielded an 11 percent increase in the annual price average from 2002 to near the record high of 1998. These favorable prices, paired with moderate feed costs, resulted in very favorable financial results. Despite likely higher feed costs in 2004 due to higher soybean meal prices, broiler output is likely to

rise another 2–3 percent. The broiler industry is huge and every percentage-point production increase represents well over 300 million pounds of broiler meat each year.

The average 12-city wholesale price of broilers was just under $62.00 per cwt. in 2003. This is likely to be slightly exceeded in 2004 but may not yield improved financial results if feed prices rise.



Turkey Production Steady and Prices Likely Up Slightly in 2004

The turkey industry, burdened by very large frozen inventory stocks in the first half of 2003, suffered through low prices and poor financial results for more than seven months. Prices for breast meat and thigh meat — important contributors to the total value of turkey meat — rose rapidly in August and September, permitting better late-year results. Annual turkey production was very near year-earlier totals and is expected to be similar in 2004. Whole turkey prices averaged down about 4 percent in 2003 and turkey breast meat averaged down more than 10 percent despite a vigorous rally from $118 per cwt. in early August to $170 a month later. Poor financial results and likely higher feed costs should keep any production increases in 2004 quite small. However, smaller frozen inventories of turkey and higher prices of competing meats should result in somewhat higher average prices in 2004.

Beef Imports Down in 2003

With Canadian beef banned for some four months, total beef imports were down about 11 percent in 2003 despite continued large imports from Australia and New Zealand. Net imports of beef into the United States of about 250 million pounds were the lowest in decades except for 1996 and 1997. Net imports of beef equaled only about 1 percent of domestic U.S. beef production in 2003, compared with the record high of 10.5 percent in 1979. The growth of beef exports has been one of the beef industry's success stories during the past two decades. Exports now come close to matching the amount of beef imported.

Beef Imports from Canada are Expected to Rebound Some in 2004

Barring any further food safety problems, beef imports from Canada should rise in 2004. There are two opposing forces at work in our international meat trade. The U.S. dollar has weakened considerably versus the Canadian, Australian and New Zealand currencies in the last year. However, the relatively high U.S. beef prices continue to make this country an attractive market.

Exports of most U.S. meats rose rapidly from the mid-1980's to the mid-1990's and the trend has continued, but at a much slower pace in recent years.

Exports of pork, broilers and turkey rose modestly in 2003, as did pork imports, particularly from Canada. Net exports of pork have trended sidewise, ranging between 1.8 and 3.2 percent of total U.S. pork production for the past eight years. The pork industry has also been very successful in increasing exports in recent years. As recently as 1986, net pork imports were 7.6 percent of U.S. pork output.

Broiler exports were 14.9 percent of domestic production in 2003, continuing a sidewise trend in recent years. The record high was 18.2 percent exported in 2000. Turkey exports were 7.6 percent of domestic output in 2003, the same as in 2002, but down from a peak of 9.2 percent in 1997. Little change from recent percentages is expected in 2004.

Egg Production Slightly Down in 2003; Prices Much Higher; Continued Strong in 2004

Egg output declined a little less than 1 percent in 2003 but wholesale prices jumped about 27 percent with prices very strong during the second half of the year. The price surged was fueled by good consumer demand, continued favorable news on the nutritional value of eggs and a slight decline in egg output.

Egg production will likely increase only slightly in 2004 and the average annual price is expected to rise again. However, prices may have trouble maintaining the peak level reached in the fourth quarter of 2003.

Per Capita Meat Consumption Declined a Bit in 2003; Likely a Small Decline Again in 2004

Total domestic consumption of meat per person declined nearly 1 percent from the record high of 220.5 pounds achieved in 2002. Beef consumption was down more than 3 percent and was

at the lowest level since 1993 and the second lowest annual level in over 40 years. Part of the decline during the past year was the result of the decline in beef imports from Canada because of the BSE event there. Also contributing to the decline was the much lower average weight of cattle marketed in the United States in 2003.

Pork, broiler and turkey consumption per person in 2003 was very near 2002 totals. A reduction in freezer meat inventories during 2003 helped keep meat consumption numbers per capita at year earlier levels.

Per capita pork consumption, at about 51.6 pounds in 2003, continued in a sidewise trend that has seen consumption vary only between 48.7 and 53.9 pounds per person for each of the last 22 years. Meanwhile, broiler consumption per person climbed to a record high of over 81 pounds per person, triple the amount consumed per person 40 years ago. Turkey consumption per capita, at 17.8 pounds in 2003 continued in a tight sidewise trend, between 17.5 to 18.5 pounds each of the last 14 years.

Little change is expected in 2004, with broiler consumption per person up a bit and beef consumption down a little, domestic cow slaughter likely down and the post-BSE effect on imports from Canada unknown at this time.

Retail Meat Prices Rose Rapidly During 2003; Should Level Off in 2004

Average retail prices of meat, led by beef, rose rapidly during 2003, particularly late in the year. The Consumer Price Index of meat rose about 5 percent, more than double that of the overall CPI increase of about 2.3 percent. The average retail price of meat in the CPI during the fourth quarter of 2003 was more than 10 percent higher than a year earlier while the general CPI of all goods and services was up only about 2.3 percent.

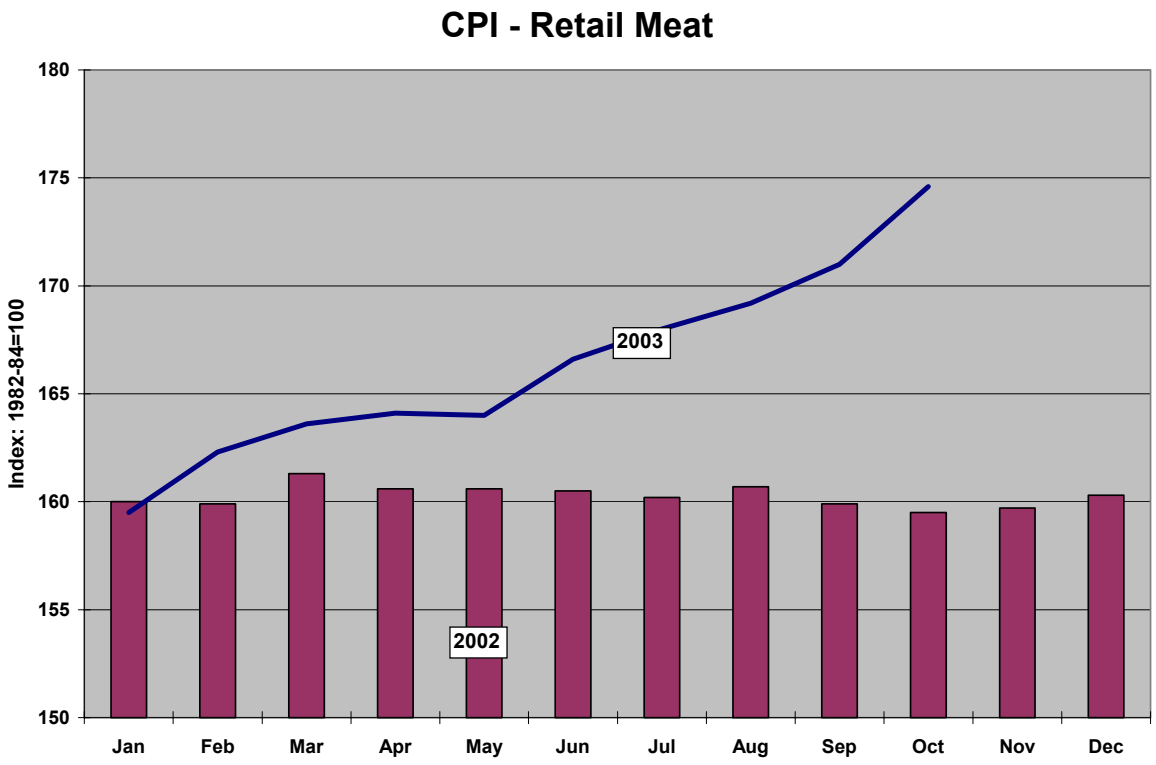
Retail beef prices led the upward thrust in meat prices with the CPI beef index rising about five percent for the year and the fourth-quarter beef price up over 14 percent. When only choice beef is considered, the USDA reports that the annual retail choice beef price rose nearly 12 percent and retail choice beef prices in the fourth quarter were about 19 percent higher than a year earlier.

The average retail price of pork was up only slightly in 2003. However, unlike 2002, when pork prices were slowly declining, prices rose throughout 2003, more strongly in the second half of the year. By the fourth quarter, they were 4 to 5 percent higher than a year earlier. Average retail poultry prices in 2003 were only about 2 percent higher than in 2002. However, their prices were also rising rapidly late in the year and were increasingly pulling away from year-earlier numbers.

Retail prices of beef and poultry late in 2003 were at all-time record high levels. Retail pork prices were about equal to the record peak set back in the late summer of 2001.

Retail meat prices in 2004 should average above those of 2003. However, 2003's rapid uptrend should be followed by a much slower upward tilt in 2004. Consumer resistance to the rapid rise in

meat prices during the last half of 2003 will battle against the relatively bullish industry factors of little change in the amount of meat produced per person, the weaker dollar and lower frozen inventories of meat as we enter the year.



BSE Infected Cow Found in U.S., Most Countries Ban Imports of U.S. Beef

An important late-breaking development — the finding of BSE in a dairy cow slaughtered in Washington — adds considerable uncertainty to 2004 meat sector forecasts.

Most major beef importing countries have implemented a ban on imports of U.S. beef. How long these bans will be in effect cannot be estimated at this time. Exports of beef in 2003 accounted for about 10 percent of U.S. beef production. While this proportion is much smaller than for Canada, it is still considerable. If the bans remain in place for several months or longer, the price impacts for finished cattle, feeder cattle and calves will be significant

There are several major unknowns at this time. Will additional BSE events occur in the United States? Will there be a significant effect on consumer demand for beef, pork, broilers or eggs? How long will the import bans continue? What will be the supply response of

livestock and poultry producers? Will countries that have banned beef imports increase their imports of U.S. pork and poultry?

Before any supply adjustments take place, the import bans will increase the amount of beef for domestic sale by about 10 percent. Total meat supplies will be up about 3 percent. These larger supplies will exert some downward pressure in meat prices, especially beef.

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Corn and Soybeans

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Synopsis

Drought conditions late in the growing season propelled soybean prices to their highest levels in several years. However, while corn prices were not as weak as in the past couple of years, they did not match the soybean price surge. The U.S. corn crop ended setting a record despite severe production problems in some parts of the country.

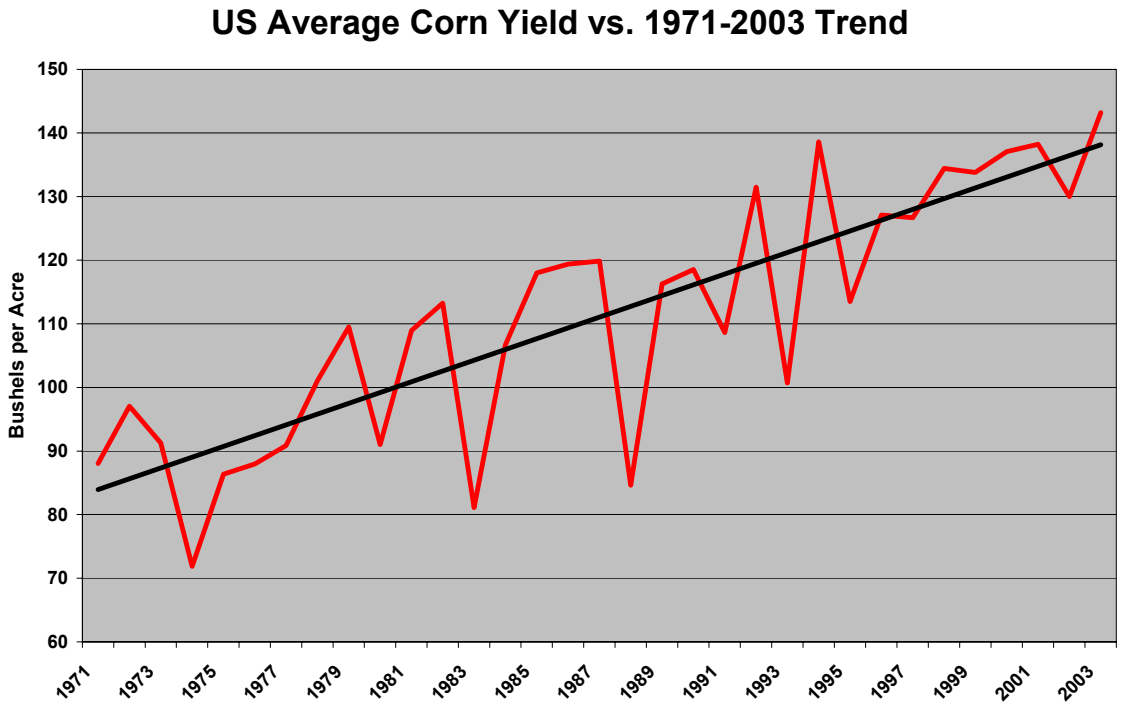
Wisconsin suffered the same soybean production problems that plagued most of the rest of the country, with 2003 production off more than 28 percent relative to 2002. The state's production shortfall occurred despite a 12.5 percent increase in harvested acres.

Wisconsin 2003 corn production was below that of 2002, but higher than both 2001 and 2000. Total production was just over 376 million bushels, with an average yield of 132 bushels per acre. The average yield in 2002 was 135 bushels per acre. Acres were also down marginally compared to last year, totaling 2.85 million.

Corn

USDA's December 2003 supply/demand estimates put the most recent U.S. corn crop at a record 10.3 billion bushels. The average national yield was estimated at 143 bushels per acre, up from 130 for the 2002 harvest. This not only established a new record average yield, but also exceeded the ten-year trend yield for the fifth time in six years.

Harvested U.S. corn acres in 2003 totaled 71.8 million, an increase of 3.6 percent over 2002. Thus, both increased yields and increased acreage contributed to the record U.S. crop.



Growth in demand for U.S. corn this marketing year (defined as September 1, 2003 through August 31, 2004) is expected to nearly match the increased production. Total use of U.S. corn is expected to be nearly 10.1 billion bushels this year, 6 percent more than was produced last year. According to the December World Agricultural Supply and Demand estimates, total feed use of corn will exceed last year's, but still fall short of feed use in 2001/02. However, the recent discovery of mad cow disease in the United States will likely have a negative impact on feed use in coming months. The current projection is that feed use in the United States will total 5.7 billion bushels, or just over half of total 2003 production.

U.S. corn exports from the 2003/04 crop are expected to increase significantly over last year, and even exceed the record level of 2001/02. Exports are currently projected at over 1.9 billion bushels, an increase of 21 percent from last year.

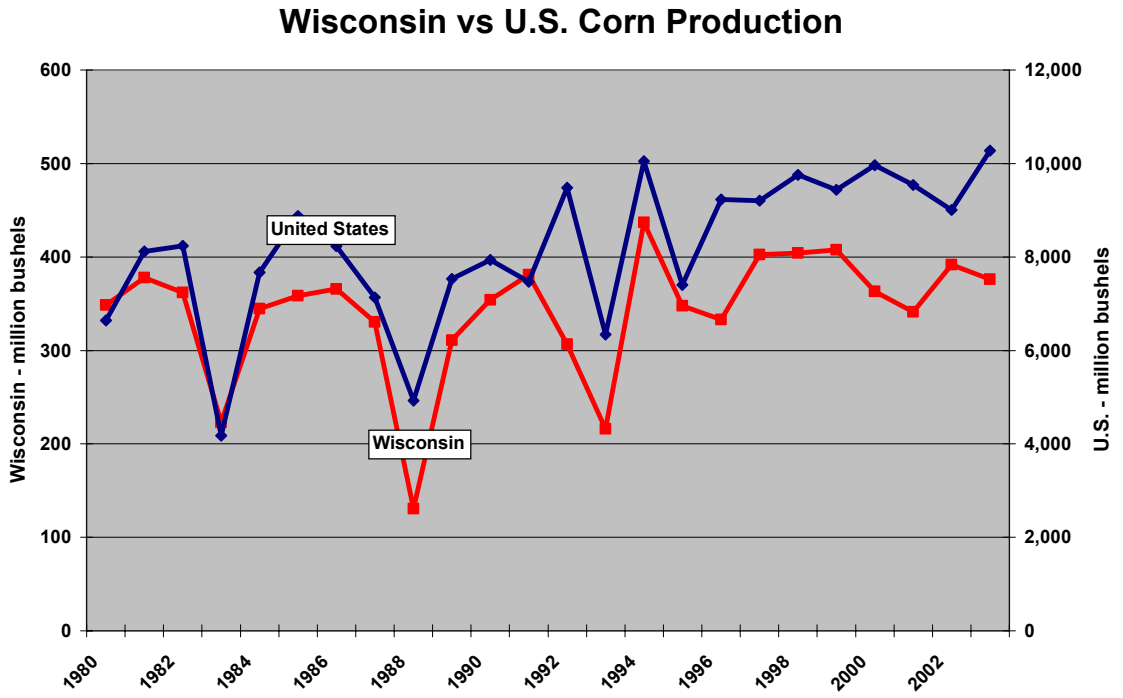
Growth in industrial use of corn is also expected. Current projections are that 2.5 billion bushels of corn will be utilized as food, seed, or industrial inputs. This represents almost 25 percent of total 2003 production. As in the recent past, the majority of growth in this category comes from corn used in ethanol production. If the current projection for 2003/04 industrial use holds, it will be the eighth consecutive year of record use levels in that category.

US Corn Balance Sheet (Sep/Aug)								
Mktg. Year	***96/97***	***97/98***	***98/99***	***99/00***	***00/01***	***01/02***	***02/03****	***03/04*****
				Million Bushels				
Beg. Stocks	426	883	1,308	1,787	1,718	1,899	1,596	1,086
Imports	13	9	19	15	7	10	14	10
Acres Planted	79.2	79.5	80.2	77.4	79.5	75.8	79.1	79.1
Acres Hvst.	72.6	72.7	72.6	70.5	72.7	68.8	69.3	71.8
% Harvested	91.7%	91.4%	90.5%	91.1%	91.4%	90.8%	87.6%	90.8%
Yield	**127.2**	**126.6**	**134.4**	**133.8**	**137.1**	**138.2**	**130.0**	**143.2**
Production	9,233	9,207	9,759	9,431	9,968	9,507	9,008	10,278
Total Supply	**9,672**	**10,099**	**11,085**	**11,232**	**11,693**	**11,416**	**10,619**	**11,374**
Feed & Res.	5,302	5,505	5,496	5,664	5,890	5,861	5,642	5,700
Food/Seed/Ind.	1,692	1,782	1,822	1,913	1,967	2,054	2,298	2,450
Exports	1,795	1,504	1,981	1,937	1,937	1,905	1,592	1,925
Total Demand	**8,789**	**8,791**	**9,298**	**9,515**	**9,794**	**9,820**	**9,533**	**10,075**
Ending Stocks	883	1,308	1,787	1,717	1,899	1,596	1,086	1,299
Stocks To Use	**10.04%**	**14.88%**	**19.22%**	**18.05%**	**19.39%**	**16.25%**	**11.39%**	**12.89%**
Avg. Farm Price	**$2.71**	**$2.43**	**$1.94**	**$1.82**	**$1.85**	**$1.97**	**$2.32**	**$2.20**

*USDA Estimate as of December 2003
**USDA Forecast as of December 2003

Corn carryout (the amount of corn left over at the end of the marketing year) for the 2003/04 marketing year is projected at 1.3 billion bushels. Despite record consumption, this represents an increase of almost 20 percent over the last marketing year but is still well below the 1.6 billion bushels carried forward from August 2002. Because of increased carryout, average U.S. farm prices of corn are expected to be 10 to 12 cents per bushel lower than year-ago averages. This appears consistent with price action the first part of the marketing year.

The most recent USDA estimates put the Wisconsin corn crop at 376.2 million bushels. This is down almost 4 percent from 2002 and results from a reduction in both harvested acres and yields relative to last year. Harvested corn acres in Wisconsin in 2003 totaled 2.85 million, down 50,000 from 2002. Wisconsin corn yields averaged 132 bushels per acre, down from last year's average of 135. The Wisconsin crop represents a smaller share of total U.S. production relative to last year. This generally implies a stronger than average basis — a small local crop means local prices are not as low relative to national average prices as would be the case with a large local crop.



Soybeans

U.S. soybean production in 2003 fell relative to the previous year's production for the second year in a row. Drought conditions in mid/late August substantially impaired a crop that appeared in June to be headed for record production. While acres planted were down slightly relative to each of the past two years, early expectations were for record yields. U.S. producers planted 73.6 million acres of soybeans in 2003 and harvested 72.5 million. This compares to 73 million acres in 2001 and 72.4 million in 2002. Surprisingly, despite a lower planted acreage relative to 2002 and the late-season drought, harvested acres in 2003 were slightly higher than harvested acres in 2002.

The average U.S. soybean yield for 2003 is estimated at 33.8 bushels per acre. This is 11 percent below last year's yield of 38 bushels per acre and almost 15 percent lower than 2001. In fact, average U.S. yields haven't been this low for a decade.

Demand for U.S .soybeans in the current marketing year is expected to be more than 10 percent below last year. Reductions are expected in every category of use except seed. Soybean crush in the 2003/04 marketing year is expected to total less than 1.5 billion bushels. Last year's crush was over 1.6 billion bushels, and the 2001/02 crush was 1.7 billion bushels.

Exports of U.S. beans from the 2003 crop are expected to be 890 million bushels, down almost 15 percent from last year. This will be the second year in a row with reduced exports of U.S. soybeans.

US Soybean Balance Sheet (Sep/Aug)								
Mktg. Year	***96/97***	***97/98***	***98/99***	***99/00***	***00/01***	***01/02***	***02/03****	***03/04*** **
				Million Bushels				
Beg Stocks	183	132	200	348	290	248	208	169
Imports	9	5	3	4	4	2	5	8
Acres Planted	64.2	70	72	73.7	74.3	74.1	73.9	73.6
Acres Hvst.	63.3	69.1	70.4	72.4	72.4	73.0	72.4	72.5
% Harvested	98.6%	98.7%	97.8%	98.2%	97.4%	98.5%	98.0%	98.5%
Yield	**37.6**	**38.9**	**38.9**	**36.6**	**38.1**	**39.6**	**38**	**33.8**
Production	2,380	2,689	2,741	2,654	2,758	2,891	2,749	2,452
Total Supply	**2,572**	**2,826**	**2,944**	**3,006**	**3,052**	**3,141**	**2,962**	**2,629**
Crush Sep/Aug	1,436	1,597	1,590	1,578	1,641	1,700	1,615	1,485
Exports	882	873	801	973	998	1,064	1,045	890
F/S/R	123	156	205	165	165	169	132	129
Total Demand	**2,441**	**2,626**	**2,595**	**2,716**	**2,804**	**2,933**	**2,793**	**2,505**
Ending Stocks	131	200	348	290	248	208	169	125
Stocks To Use	**5.37%**	**7.60%**	**13.41%**	**10.68%**	**8.84%**	**7.09%**	**6.05%**	**4.99%**
Avg. Farm Price	**$7.35**	**$6.47**	**$4.93**	**$4.63**	**$4.54**	**$4.38**	**$5.53**	**$7.25**

The USDA projected carryout for the 2003/04 marketing year is 125 million bushels (December estimate), a reduction of 26 percent from last year's carryout. This historically low carryout projection will result in significant price volatility given any unexpected changes in spring and summer demand.

The 2003 Wisconsin soybean crop mirrored the problems experienced nationally. Wisconsin soybean production in 2003 was just under 47.9 million bushels, a reduction of more than 28 percent over last year. Harvested soybean acres in Wisconsin in 2003 were actually up 12.5 percent from 2002, so the entire production shortfall resulted from poor yields. USDA estimated that Wisconsin average soybean yields in 2003 were 28 bushels per acre, well below the national average and more than 36 percent below Wisconsin's 2003 average of 44 bushels per acre. Wisconsin yields have surpassed the national average in recent years.

The poor U.S. crop and low carryout projection have pushed soybean prices above $8 per bushel this marketing year, the highest prices seen since 1996. However, the longer-term prospects for continued high prices are not good. Even if the U.S. had had a normal crop in 2003, the combined production of Argentina and Brazil would have exceeded U.S. production. Given decent weather, Brazil and Argentina will again harvest record crops in 2004.

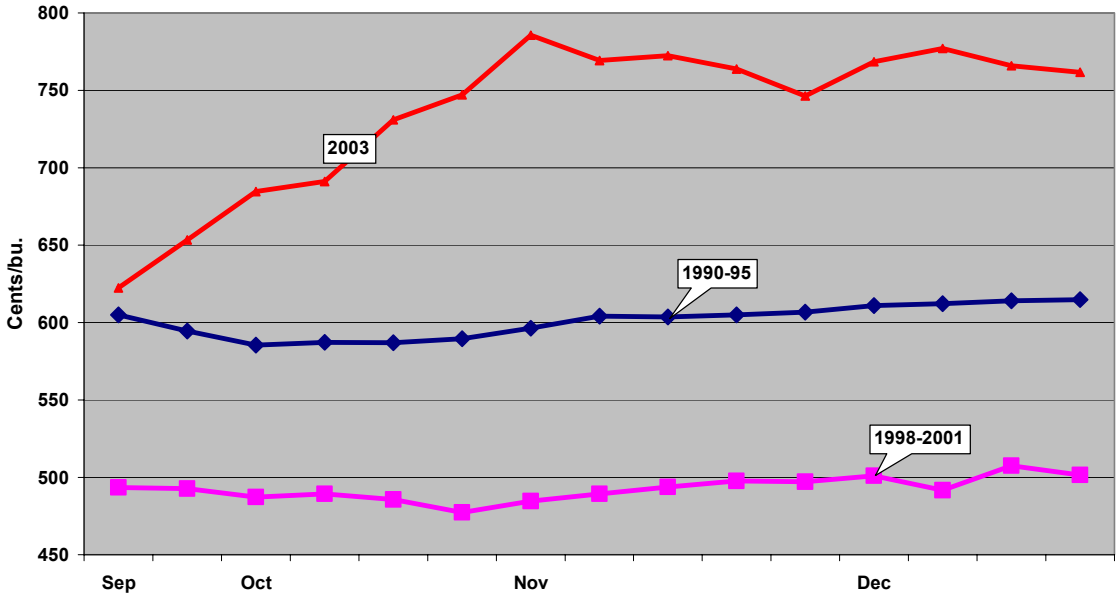
UDSA projects that Brazil will produce 60 million metric tons of soybeans this

year (2.2 billion bushels), an increase of more than 14 percent over last year's production. Argentina is expected to produce 36.5 million metric tons, an increase of almost 3 percent over last year. As a result, despite the poor U.S. crop, world ending stocks this year are expected to drop by only 5 percent relative to last year. World stocks will exceed those in 2001/02 by more than 14 percent. If the current projections for South American production are realized, soybean prices will be significantly lower in the spring. To some extent, the market is already anticipating a return to more normal production expectations. As of this writing, soybeans for delivery next November were trading at more than a $1.50 per bushel discount to prices for delivery in March 2004. By early spring, South American weather will begin to drive soybean prices.

Spring prices will move lower unless there is serious concern about crop prospects in the Southern Hemisphere.

The last time U.S. carryout fell below 200 million bushels (1996/97), farm prices for U.S. soybeans averaged well over $7 per bushel, consistent with post-harvest prices this year. However, world stocks were significantly lower than they will be this year if South America production projections pan out. The result is that past U.S. carryout/price relationships may not be a good indicator of prices this spring and summer. Regardless of where the South American crop ends up, extreme price volatility is expected to continue through spring and early summer.

Average Weekly Soybean Prices:
Nearby Futures Contract



Farm Inputs, Credit and Land

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Production Inputs

Prices paid by U.S. farmers for most production inputs were higher in 2003, continuing a decade-long trend.

The greatest price hikes were for fertilizer. This is primarily due to dramatic increases in the price of anhydrous ammonia — roughly $100 per ton higher than a year ago. Supplies were short because of higher prices for natural gas, the raw material for this type of fertilizer. Natural gas prices are likely to remain high throughout the winter heating season, so there is no reason to expect anhydrous prices to drop by the time farmers head into the fields this spring.

Agricultural chemical prices are about 3 percent higher than a year ago. This modest increase suggests that industry competition is keeping chemical suppliers from passing on higher production costs to farmers.

Agricultural Prices Paid Indexes (1990-92 = 100)
November 2003 versus November 2002

	Nov. 2002	*Nov. 2003*
Production Items	120	126
Feed	114	116
Livestock & Poultry	105	122
Seeds	144	157
Fertilizer	109	126
Agricultural Chemicals	119	122
Fuels	123	144
Farm Supplies & Repairs	132	134
Autos & Trucks	116	113
Farm Machinery	149	151
Building Materials	122	125
Farm Services	120	123
Rent	119	120
Interest	104	104
Taxes	126	128
Wage Rates	155	156
Family Living (CPI)	134	137

Source: U.S. Department of Agriculture, National Agricultural Statistics Service, *Agricultural Prices*, November 2003

Prices for conventional seed varieties were up about 3 percent from 2002, while prices for genetically modified seeds (e.g., Roundup Ready soybeans) were up 8 percent. Prices for genetically modified crop seeds increased more due to stronger demand and because seed companies exploited the advantages they currently enjoy through patents on GMO seeds.

Fuel costs in 2003 averaged about 17 percent higher than in 2002, reflecting a major run-up in oil prices during the first half of 2003. Fuel prices have since fallen, but they are still near the highs last experienced in 2001. Fuel prices have been trending upward since about 1999 and the trend will likely continue through 2004. Expect fuel prices to increase 3–4 percent in 2004.

Farm Credit

Results of the Federal Reserve Bank of Chicago's survey of agricultural bankers suggest that credit conditions in Wisconsin and neighboring states have improved slightly from a year ago. The index for loan repayments was higher for the third quarter of 2003 than for the same period in 2002, while the index for loan demand was down for the same period. This suggests that farmers are having an easier time servicing their debts than they were a year ago and are using less credit to finance their operations.

Bankers surveyed by the Chicago Fed indicated that they are continuing to require high collateral. But those requirements may be loosening a bit. A year ago, 21 percent of bankers surveyed said they were increasing collateral requirements compared to only 14 percent in 2003.

Credit conditions in Wisconsin were slightly less encouraging than those reported elsewhere in the Chicago Federal Reserve Board District. Wisconsin bankers reported the lowest loan repayments levels and indicated little increase in demand for non-real estate loans. This is not surprising given that low milk prices throughout much of 2003 cut dairy farm incomes.

Interest rates on farm loans continue to be low and are marginally lower than last year. Average rates on farm operating loans are down 80 basis points, from 7.2 percent in the third quarter of 2002 to 6.4 percent in the same quarter of 2003. Average interest rates on farm real estate loans in 2003 were also lower, but the decline was slightly less than for non-real estate loans.

Interest rates could rise in 2004 if the U.S. economy continues the strong recovery seen recently. If these positive trends continue, demands for credit should rise along with the economy and interest rates would climb.

The extent to which interest rates rise depends largely on what actions are taken by the Federal Reserve Board. Current low interest rates are largely the result of the Fed's decision to cut interest rates in order to stimulate the U.S. economy. Now that the desired turnaround has started to take place, the Fed will likely start increasing interest rates to prevent the economy from overheating to the point that inflation begins to rise. Any such increases in

interest rates are not likely to be dramatic because the Fed doesn't want to risk choking off the economic turnaround. The likely maximum boost in Fed interest rate during 2004 is about one percentage point unless there are clear signs of inflation.

Cash Rents

The National Agricultural statistics Service reported little change in cash rents for either Wisconsin cropland or pasture in 2003. The average cash rent for cropland rose $1 per acre, from $67 in 2002 to $68 in 2003. The average cash rent for pasture land held constant at $36 per acre, the going rate since 2001.

The modest increases in the cash rents for Wisconsin cropland seen since 1999 are generally less than increases in neighboring states. Between 1999 and 2003, cash rents for cropland rose about $6 per acre in Minnesota, $12 in Iowa and $10 in Illinois. Rents rose more in those states because crop returns per acre were higher there.
Cash rents for pasture in Wisconsin have fallen by $2 per acre since 1999, while pasture rents in Iowa, Illinois, and Minnesota have either risen slightly or held constant. This has brought pasture rents in those states more in line with those paid in Wisconsin.

Pasture rents could be moving upward slightly in the coming year given that beef prices are $20 to $25 higher than a year ago. Higher cattle prices will likely induce farmers to put more cattle on pasture pushing rents up marginally.

Farmland Values

According to the Wisconsin Agricultural Statistics Service, the average value of Wisconsin farm real estate (including land and buildings) was $2,300 per acre on January 1, 2003. This was $150 per acre higher than 2002 and $300 higher than 2001. Since returns to farming have been stagnant, these gains in farmland values are generally attributable to strong non-farm demands for farmland.

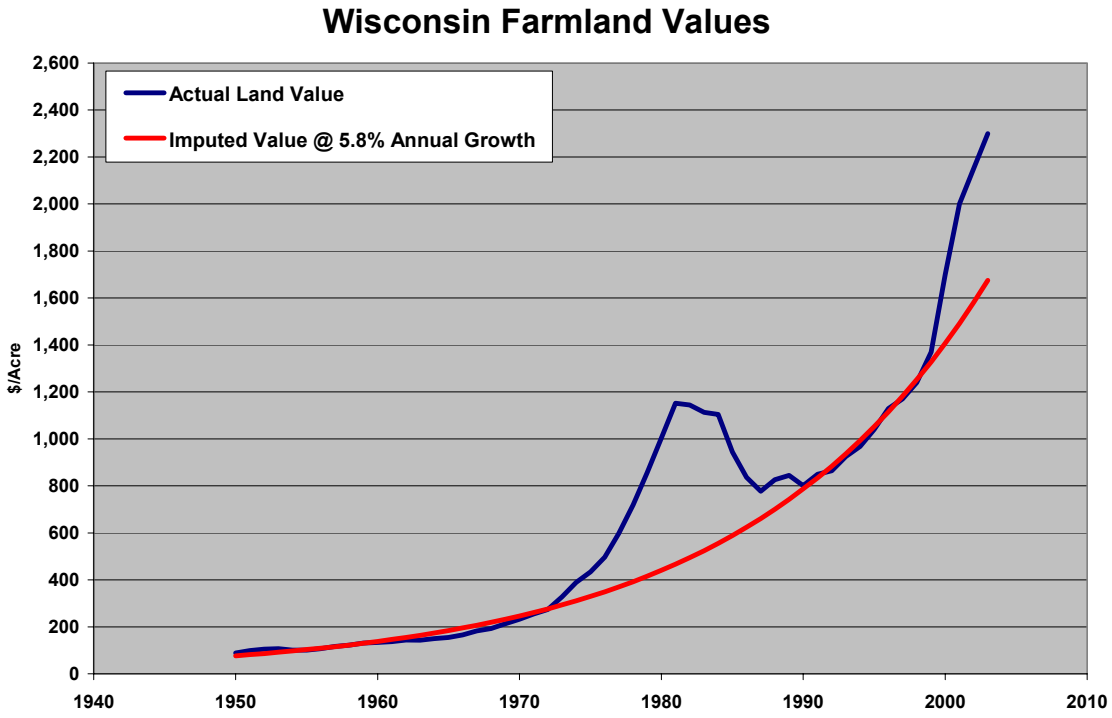
The recent run-up in farmland values has created a situation that is strikingly similar to what occurred in the last half of the 1970s, when farmland values rose at rates well above the 50-year historic average rate of 5 to 6 percent per year. After several years of robust growth, farmland values began to plummet in 1981, eventually falling to levels more in line with the historic trend in farmland values.

Wisconsin farmland values have been rising at annual rates well above the 50-year average growth rate since 1998. Could this be a signal the Wisconsin farmland market is overvalued and ripe for a correction similar to what occurred in the early 1980s?

While the recent run-up in farmland values is similar to the speculative bubble 20 years ago, things are different this time around. In the 1970s, farmland values rose because farmers were aggressively purchasing land for speculative purposes and financing their purchases with borrowed capital. This left many farmers in a precarious financial position when the bottom fell out of the farmland market. Land was quickly and significantly devalued

because of extensive farm foreclosures and bankruptcies.

The recent round of farm real estate value appreciation is being fueled principally by nonfarm investors purchasing farmland for recreational and residential purposes. These buyers don't need farm returns to pay for their investments. We could see a downward correction in the farmland market if nonfarm demand softens and low farm incomes discourage farmers from purchasing land being put on the market by retiring farmers. But even if this happens, prices will not fall as they did in the early 1980s, when inordinate amounts of farmland were being sold to settle farm foreclosures.



Macroeconomic Outlook

Bill Dobson, Emeritus Professor

Hitting on Nearly All Cylinders

After going through a rough patch in 2001 and 2002, the U.S. economy began to hit on nearly all cylinders beginning in the third quarter of 2003. Indeed, the 8.2 percent revised real Gross National Product (GDP) growth rate recorded for the third quarter of 2003 was the highest rate of increase since 1984. Consumers also began to spend with more gusto late in 2003, helping to pump up corporate profits and stock prices. The one cylinder of the U.S. economy that continues to misfire is employment. The U.S. unemployment rate remained at about 6 percent in the third quarter of 2003.

How did the U.S. economy slip into recession? How and why did it begin to recover? What is in prospect for the U.S. economy? What do these developments mean for the U.S. and Wisconsin agricultural sectors? Let's look at these questions one-by-one.

Recession and Recovery

The growth rate for the U.S. economy tapered off in late 2000 and the economy slipped into recession in 2001. Specifically, the real GDP growth figures were negative for the first three quarters of 2001. Economic growth remained subdued during parts of 2002 and the first quarter of 2003. (Recent revisions of the GDP figures indicate the recession may have begun before 2001.) Several developments contributed to the U.S. recession. These included the terror attacks of September 11, 2001, the bursting of the stock market bubble and corporate scandals.

Macroeconomic Statistics for the U.S. Economy, 1998 to 2003

Year or Quarter	*Real GDP Growth (%)*	*Unemploy-ment Rate (%)*	*Inflation Rate (CPI) (%)*	*Federal Funds Rate (%)*	*Federal FY Surplus (deficit) ($Bil.)*
1998	4.3	4.5	1.5	5.35	69.2
1999	4.1	4.2	2.2	4.97	124.4
2000	3.8	4.0	3.4	6.24	236.9
2001	0.3	4.8	2.8	3.89	127.3
2002	2.4	5.8	1.6	1.67	(157.8)
2003:					
Q1	1.4	5.8	3.9	1.25	(144.9)
Q2	3.3	6.2	0.6	1.25	(16.6)
Q3	8.2	6.1	2.3	1.02	(104.5)

Source: Global Insight, U.S. Economic Service, various issues, 2003

For the growing number of unemployed, the economic conditions felt worse than the real GDP growth figures suggested. People employed in manufacturing jobs in Wisconsin and the rest of the nation suffered the biggest hits in recent years. Wisconsin shed about 80,000 manufacturing jobs from the 1999 peak to late 2003. The U.S. manufacturing sector shed about 2.8 million jobs from mid-2000 to October 2003. Finally, after 37 consecutive months of decline, the United States added manufacturing jobs in November 2003.

The late-2003 GDP growth that signaled the end of the recession reflected adjustments made by businesses, strong fiscal policy measures (tax cuts and increases in government spending), and a strongly accommodative monetary policy. When demand for their products falls, companies work down inventories, lay off workers and take other steps to cut costs and increase productivity. But retrenchment can go only so far and gradually companies replenish inventories and rehire workers, setting in motion an economic recovery. The Bush Administration, Congress, and the Federal Reserve Bank (Fed) were not content to leave recovery from the recession to self-correcting developments. The Administration and Congress cut income taxes to spur the recovery. In addition, the Fed — fearing deflation of the type that crippled the Japanese economy for much of the 1990s and early 2000s — cut the Federal funds rate to the lowest levels in four decades.

The Fed had the discretion to pursue this low-interest rate policy because of excess capacity existing in U.S. factories (27 percent late in 2003), lack of other supply pressures, and lack of strong demand pressures. These conditions sharply reduced the chances that the economy would quickly overheat and push up prices to unacceptable levels. Indeed, inflation prospects are so low that the Fed is likely to leave interest rates low until about mid-2004.

What is in Prospect for the U.S. Economy?

The impact of the expansionary monetary and fiscal policy measures will diminish in 2004. Accordingly, the real GNP is expected to grow 4 to 4.5 percent in 2004. Inflation and the Federal Funds rate will remain low, but not as low as in 2002 and 2003. Unemployment will remain stubbornly high — 5.8 to 6 percent — through much of 2004. Most of the jobs lost in manufacturing in Wisconsin and the remainder of the United States will not be regained. Moreover, the 4 to 5 percent productivity gains obtained by companies during 2002 and 2003 will reduce the demand for workers.

The United States is not alone in losing manufacturing jobs. A study by Alliance Capital Management in New York showed that reductions in manufacturing employment occurred in most industrialized countries from 1995 to 2002. Of the 20 nations studied, only Spain, Canada and Taiwan increased manufacturing employment during this period. Surprisingly, China's rapidly industrializing economy lost 15 percent of its manufacturing jobs from 1995 to 2002. The fall in manufacturing jobs in industrialized countries appears to be much like the decline in agricultural

employment that occurred in the United States and other advanced, industrialized countries from about 1910 to 1990. For the foreseeable future, increases in employment will occur mostly in the service sectors of developed economies. This service sector hiring will lower unemployment rates, but many of the new jobs will carry lower pay than manufacturing jobs.

Stubbornly high unemployment has created a dilemma. The decline in U.S. manufacturing jobs may have little to do with government policy, but this doesn't ease the minds of unemployed manufacturing workers. This point, of course, is not lost on the Bush Administration. To cater to demands of an evenly divided electorate and attempt to retain GOP control of the White House and Congress, the Bush Administration raised tariffs to protect the U.S. steel industry in March 2002 and supported a 2002 Farm Act that increased outlays for farm programs. It also backed many state projects favored by members of Congress to increase employment in their home states. (The higher steel tariffs were eliminated in early December 2003 after they were declared illegal by the World Trade Organization).

These Federal expenditures, added to those for the Iraq war and the war on terrorism, have caused federal deficits to climb. Final tallies indicate that the federal budget deficit will be about $375 billion for fiscal 2003, and it is expected to increase to about $475 billion in fiscal 2004. The new Medicare legislation, which includes a prescription drug benefit for seniors, will further hike the federal deficit later in the decade.

Federal deficits are not the only long-term problem facing the U.S. economy. The nation has a large current account deficit — about $550 billion in 2003. The weakening of the dollar that occurred in 2003 makes U.S. exports cheaper, which should help reduce the trade portion of the current account deficit. The dollar's decline was substantial. For example, in late December 2003 one Euro was worth about $1.24 after being at near parity with the dollar a year earlier.

The weakening of the dollar should not be harmful as long as it happens gradually. But a large, precipitous drop in the dollar and an associated rapid exodus from the currency would harm the U.S. economy. This would require interest rate hikes or government intervention in foreign currency markets to shore up the dollar. If those actions failed to strengthen the dollar, a recession might follow, which would reduce imports enough to bring down the U.S. current account deficit to more acceptable levels.

Implications for the Wisconsin and U.S. Agricultural Sectors

Macroeconomic developments such as those described above aren't the only factors that influence the U.S. and Wisconsin agricultural sectors. In particular, supply and demand conditions for individual farm products typically influence prices more than the overall macroeconomic environment. Witness how supply reductions and strong beef demand boosted U.S. cattle prices in 2003 prior to the discovery of mad cow disease in Washington State in December. Also witness how U.S. beef prices were hurt by the drop in export

and domestic demand for beef after the mad cow case was reported.

However, prospective macroeconomic developments will help parts of the U.S. agricultural sector. First, the strong consumer demand conditions anticipated for 2004 will increase the demand for cheese. This is welcome news for Wisconsin's milk producers and cheese processors, who suffered from weak consumer demand at times in the past two years. Second, U.S. farming is capital intensive, and low interest rates will reduce capital costs for farm machinery and other equipment. Third, continuing low interest rates will continue to weaken the dollar and spur U.S. agricultural exports. The weaker dollar, together with crop shortfalls in Europe and China, will produce modestly higher U.S. agricultural exports — $56.5 billion to $57.5 billion for fiscal 2004.

The burgeoning federal budget deficits in prospect for the next few years will cause lawmakers to scrutinize farm program costs, particularly after the 2004 election. One program likely to receive close scrutiny is the Milk Income Loss Contract (MILC) program, which is scheduled to expire in 2005. Getting the MILC program extended until 2007, when other parts of the 2002 Farm Act are to be revisited, will be no slam dunk.

III. Special Articles

The Rocky International Trade Situation: Implications for U.S. Agriculture

Bill Dobson (Emeritus Professor)

Synopsis

The road to international trade accords has been steep and rocky with numerous detours. The Doha Round of World Trade Organization (WTO) negotiations was initiated in October 2001 to much fanfare. Two years later, the negotiations nearly collapsed after Trade Ministers failed to agree on much of anything at meetings in Cancun, Mexico. The lack of progress on multilateral agreements seems to have steered the U.S. toward more bilateral agreements with selected, generally small countries.

But meetings in Miami in November to push negotiations for the ambitious Free Trade Agreement of the Americas (FTAA) produced only a watered-down agenda for additional discussions — an agenda that allows countries to opt out of negotiating on commitments they don't like.

As in the past, agriculture has emerged as a key sticking point in trade negotiations. In the Cancun WTO meetings, Brazil and India led a group of 22 developing countries that strongly opposed additional trade concessions unless the European Union (EU) and the United States agreed to reduce trade-distorting domestic price supports and open their markets to additional agricultural imports. Brazil continued to press the United States for agricultural trade concessions in the FTAA meetings in November 2003 but did not torpedo those negotiations.

Despite the lack of progress in the WTO and FTAA negotiations, the emergence in the United States of "creeping protectionism" and the diagnosis of mad cow disease, the prospects for U.S. agricultural exports remain reasonably good. However, it is equally evident that U.S. agricultural exports are falling far short of expectations that existed in the mid-1990s.

U.S. Agricultural Trade Prospects

In mid-November the USDA forecast that U.S. agricultural exports will rise to about $59.5 billion in fiscal 2004. This is up 6 percent above the 2003 figure and nearly the same in nominal dollars as the record U.S. agricultural exports for fiscal 1996. Higher prices for soybeans, in particular, account for much of the increase in the value of U.S. agricultural exports for fiscal 2004. Higher prices and trade volumes also boosted the value of U.S. cotton and beef exports. Crop shortfalls in China and Europe account, in part, for the higher prices and expanded U.S. agricultural exports.

Because it fails to reflect the impact of discovery of mad cow disease in Washington on U.S. beef exports, the

USDA's November forecast of agricultural exports for fiscal 2004 will undoubtedly err on the high side. It is obviously difficult to predict how much impact the U.S. case of mad cow disease will have on our agricultural exports. The decline in U.S. beef exports could be as much as $3 billion in fiscal 2004. However, this will be partially offset by increases in pork and poultry exports as foreigners substitute these products for U.S. beef. Therefore, aggregate U.S. agricultural exports probably will be $2 billion to $3 billion lower than the USDA's mid-November forecast, or $56.5 billion to $57.5 billion in total.

The weaker dollar will promote agricultural exports. The 9 percent depreciation of the total agricultural-trade-weighted dollar in 2003 is forecast to continue in 2004. U.S. agricultural exports are expected to be more competitive in international markets as the full effects of the dollar depreciation are felt in 2004.

In contrast to the negative trade balance for the U.S. economy as a whole, U.S. agriculture continues to maintain a positive trade balance. While the agricultural trade balance will be lower than forecast by the USDA in mid-November 2003, expect the positive agricultural trade balance in billions to be in the high single-digit range for fiscal 2004 and only moderately smaller than in recent fiscal years. U.S. agricultural imports consist mostly of meats, cheeses, milk protein concentrates, casein, fruits, nuts, vegetables and wine.

U.S. Agricultural Exports, Imports, and Trade Balance, $Billion

Fiscal Year	*Exports*	*Imports*	*Ag Trade Balance*
1995	54.7	29.9	24.8
1996	59.9	32.6	27.3
1997	57.4	35.8	21.6
1998	53.7	37.0	16.7
1999	49.1	37.3	11.8
2000	50.7	38.9	11.9
2001	52.7	39.0	13.7
2002	53.3	41.0	12.3
2003	56.2	45.7	10.5
2004F	59.5	48.5	11.0

Sources: *Outlook for U.S. Agricultural Trade*, FAS-USDA, November 2003 and, *Agricultural Outlook,* ERS-USDA, Various Issues 1998 to 2000.

While U.S. agricultural export prospects for fiscal 2004 remain more favorable than in to recent years, they fall far short of the expectations voiced in the mid-1990s. Indeed, after reaching nearly $60 billion in fiscal 1996, some analysts predicted that U.S. agricultural exports would surpass $100 billion by 2000 or shortly thereafter.

Congress and the Administration shared this optimism about U.S. agricultural exports. The 1996 Farm Act, which sharply reduced U.S. agricultural subsidies, was crafted under the assumption that growing agricultural exports would eliminate the need for high farm commodity price supports. Accordingly, the 1996 Farm Act eliminated acreage reduction programs, target prices and deficiency payments for producers of major crops and reduced the relatively high non-recourse crop loan rates that had been features of previous farm bills. The USDA's dairy price support program also was earmarked for elimination at the end of 1999.

The hopes underpinning the 1996 Farm Act were dashed in the late 1990s. U.S. farm exports sagged primarily because of good crops in major foreign markets and recessions in parts of Asia and Russia.

The 2002 Farm Act and stopgap legislation passed prior to this legislation reinstated price supports for certain commodities that were eliminated or scheduled for elimination under the 1996 Farm Act. This U-turn regarding farm price supports angered U.S. trading partners, who contended that the new legislation increased agricultural trade distortions, expanded supplies of U.S. farm products, and increased the competition that our trading partners faced from the United States in agricultural export markets. After passage of the 2002 Farm Act, many U.S. trading partners lumped us with the EU, characterizing governments of both countries as protectionist and increasingly anti-free trade in agriculture.

A Brief Account of the Rocky Course of Trade Negotiations

How did our country reach the present rocky situation regarding trade negotiations? In 1999, in Seattle, we hosted what we hoped would be fruitful WTO negotiations on trade liberalization. Demonstrators broke up these negotiations and caused millions of dollars of property damage while protesting against trade liberalization and globalization.

Agricultural trade negotiations under the WTO opened in Geneva, Switzerland in March 2000. These preliminary negotiations addressed national agricultural policies relating to market access limitations (tariffs, tariff rate quotas and other trade barriers), domestic support to agricultural producers, and export subsidies. Negotiators made progress in identifying agricultural issues for consideration in the WTO meetings that were to be opened later on a full range of trade issues.

The full WTO negotiations were re-started in November 2001 in Doha, Qatar — a location less accessible and less hospitable to demonstrators. The

Doha talks established an agenda for negotiating further reductions in barriers to agricultural and nonagricultural trade, protection of intellectual property, and related issues under the WTO. In preparation for additional negotiations under the Doha Round, U.S. and EU negotiators developed a framework relating to agricultural trade to increase market access and reduce trade-distorting domestic price supports and agricultural export subsidies.

Trade ministers meeting in Cancun, Mexico in September 2003 were supposed to provide a blueprint for completing the Doha Round WTO trade agreement. One trade official likened the Cancun meetings to a golf match: Participants had made good drives and had only to make good approach shots and short putts to complete the round. Instead, they ended up whiffing the ball on the fairway and left Cancun in disappointment before completing the round.

Agricultural issues turned out to be the main impediment to progress in the Cancun meetings. Brazil and India led a group of 22 developing countries opposing measures to safeguard intellectual property, reduce industrial tariffs and other barriers to trade and foreign direct investment unless the United States and EU agreed to substantial further agricultural trade liberalization. The 2002 U.S. Farm Act came under scathing criticism. U.S. negotiators found many of the developing countries' demands to be unacceptable — especially those relating to market access, trade-distorting domestic price supports, and other agricultural trade issues. Conveners of the meeting gave up any hope of immediate progress and terminated the talks. U.S. agricultural industry participants had mixed feelings about the outcome. "No agreement is better than a bad agreement," they were heard to say.

Many issues were involved in the breakup of the Cancun negotiations. Brazil's new President, Luiz Inacio Lula da Silva, was keen to give his country a bigger role on the world stage. Tweaking the noses of the big players, especially the United States and Europe, was seen as helping to advance this agenda and played well in Brazil and certain other Latin American countries. However, the Brazil-led actions were not entirely political. The developing countries do have a legitimate beef about agricultural subsidies in the United States, Europe and other developed countries. According to the USDA's Economic Research Service, nearly 80 percent of world agricultural price distortions are accounted for by practices of developed countries.

Efforts have been made to get big players in the WTO, especially the EU, United States and China, to get behind measures to restart the meetings. However, these powerful players are encouraged to drag their feet by industry groups who benefit from existing programs and border protection. They seem to be in no hurry to reinitiate negotiations. If the history of previous GATT/WTO rounds is an accurate predictor, expect the Doha Round WTO negotiations to resume eventually. When this will occur is unclear.

The Free Trade Agreement of the Americas (FTAA) negotiations held in Miami in November 2003 went much like the Cancun WTO meetings. Brazil

again pressed the United States for additional market access and other agricultural trade concessions but agreed to smooth over such differences to prevent a breakdown of the talks. U.S. negotiators said that agricultural trade liberalization issues had to be considered within the broader WTO framework. Otherwise, they argued, the United States would end up unilaterally disarming while the EU and Japan, in particular, would be allowed to keep their trade-distorting domestic agriculture price supports and existing border protection. The main result of the Miami FTAA meetings was a watered-down agenda for future discussions.

The United States is not giving up on negotiating new trade agreements. One such agreement that is likely to materialize within months is the Central American Free Trade Agreement (CAFTA).

While the Central American parties to this agreement (Nicaragua, Costa Rica, Honduras, Guatemala, and El Salvador) do not have large economies, the importance of the agreement should not be minimized. Costa Rica has a rapidly developing economy that will represent a substantial market for U.S. agricultural and nonagricultural products and U.S. direct investment. El Salvador, which adopted the U.S. dollar as its currency two years ago, is emerging as a Central American banking and investment leader. This will hasten development of markets in the region.

U.S. imports of products from Central America are also expected to increase under the CAFTA. Specifically, imports of specialty dairy and livestock products from Nicaragua will likely expand. In addition, if successfully implemented, the CAFTA may encourage Latin American countries that have balked at entering a meaningful FTAA to reconsider their positions.

The Emphasis on Bilateral Trade Agreements

The United States has begun negotiating more bilateral trade agreements, using the recent U.S.-Chile and U.S.-Singapore agreements as models. Countries that have expressed interest in such agreements include Peru, Colombia, Ecuador, Bolivia, Panama, Morocco and, perhaps most importantly, Australia.

The Australia agreement is important because farmers there produce a number of products, including beef and dairy products, that compete directly with U.S. farm products. U.S. negotiations with Australia on the bilateral trade agreement have been delayed in part because of concerns of U.S. beef and dairy producers about added competition from Australia. If we reach a bilateral trade agreement with Australia that includes dairy products, access for Australian dairy products to the U.S. market will be increased slowly over a decade or more. This is the pattern that has been followed on other bilateral agreements with countries such as Chile and Mexico.

The Perils of "Creeping Protectionism"

In late 2003, Federal Reserve Chairman Alan Greenspan warned the United States against engaging in "creeping protectionism." His concern may have been sparked by the higher steel tariffs imposed by President Bush in March

2002. The tariffs of up to 30 percent on certain imported steel products were scheduled to last for three years. They were supposed to allow the U.S. steel industry to restructure and become more competitive. The higher tariffs also were designed to help President Bush in the 2004 elections by boosting employment in Pennsylvania, West Virginia and other states. The tariff increase was far from successful. In particular, the higher tariffs raised U.S. steel prices and hurt U.S. steel users. Because of this, it is not even clear that the tariffs increased aggregate U.S. employment

While certain foreign steel products were excluded from the higher tariffs, steel-exporting nations protested vigorously and took the United States to the WTO for violating the trade agreement. WTO dispute settlement panels found this to be the case. The EU said that it would impose additional duties on some $2.2 billion of annual U.S. exports to the EU if the United States did not eliminate the increase in steel tariffs. Fearing the EU retaliation, President Bush announced that the tariffs had accomplished their purposes and eliminated them in early December 2003. Steel exporters and other nations heralded this action as a victory for the WTO. If a big player like the United States could be forced to back down, they reasoned, the WTO must still have teeth.

Chairman Greenspan also saw creeping protectionism in the U.S. action to limit imports of Chinese-made bras, bathrobes and fabric in November 2003. This move angered the Chinese, who are sensitive to any trade restrictions because they have been repeatedly exhorted by the United States to allow the Chinese currency — currently pegged at 8.28 Yuan to one U.S. dollar — to appreciate. Certain U.S. companies have argued that an undervalued Chinese currency is responsible for much of the $130 billion U.S. bilateral trade deficit with China that is projected for 2003. The Chinese reaction to the limit on textile imports and other U.S. trade threats was muted but it did have implications for agriculture. China postponed a buying mission to the U.S. grain and soybean belt. China has since rescheduled the visit.

Why so much concern about creeping protectionism? One explanation is that if the world's leading economic power indulges in protectionism, other exporting nations will feel free to do the same. This is not an idle concern since it could jeopardize legitimate uses of safeguard provisions. The United States used safeguard provisions to justify higher tariffs to protect the U.S. steel industry. Such safeguard provisions, when properly and transparently used, are helpful for defending a domestic industry when imports increase unexpectedly and sharply. However, in the year before the Bush Administration imposed the higher tariffs, U.S. steel imports actually decreased by a fifth and domestic steel prices were buoyant. This supported the WTO ruling that the higher tariffs were not justified.

Contrast the increase in steel tariffs to those used by the United States to protect its cheese market in 2002. Under the Uruguay Round of the WTO agreement, the United States is entitled to apply an additional duty on imports of American-type cheeses when imports exceed a trigger of 36 million pounds

per year. In the first nine months of 2002, U.S. imports of American-type cheese had climbed to 48 million pounds and were depressing domestic cheese prices. In response, the United States increased over-quota tariffs on American-type cheese imports by $.17 per pound (to $.64 per pound in total) from mid-November through December 31, 2002. The WTO did not challenge this application of higher cheese tariffs. This is undoubtedly the kind of application that negotiators had in mind when they included safeguard provisions in the Uruguay Round WTO agreement.

Finally, other countries can be expected to point to U.S. protectionism to justify questionable trade negotiating practices. The U-turn made by the U.S. on farm programs has been used by Brazil and India as one justification for delaying trade liberalization under the WTO. If such actions snowball, expect the demonstrated benefits of freer trade to be jeopardized.

The Longer-Term U.S. Agricultural Trade Outlook

The long-term outlook for U.S. agricultural exports is murky, with numerous positive and negative factors influencing prospects. On the plus side are the following developments:

- The U.S. dollar will remain weak for at least the next few years, enhancing prospects for expanded exports of agricultural and non-agricultural products.

- Global demand for agricultural products will grow modestly for the next few years if, as expected, the world economy continues to recover.

- U.S. agricultural industries, particularly the soybean, grain, meat, and poultry sectors, are competitive in international markets.

On the negative side, there are a number of uncertainties that may hold down U.S. agricultural exports:

- Negotiations on a new WTO agreement are presently in limbo and may not produce opportunities for expanded U.S. agricultural exports for several years.

- U.S. trade negotiations, which have always been somewhat politicized, have become more heavily politicized in recent years. Both major political parties have used, or advocated use of, protectionism to increase employment in the United States. This political environment is not conducive to passage of agricultural trade-expanding agreements.

- The upcoming Presidential elections in 2004 may delay passage and implementation of bilateral trade agreements, some of which could expand U.S. agricultural exports.

- The Trade Promotion Authority ("Fast Track" trade negotiating authority) given to President Bush by the Congress in 2002 will expire in 2005. If this

authority is not renewed, it will stymie U.S. negotiations on any new trade agreements.

- China has emerged as a bigger player and important competitor in agricultural export markets — especially for corn exports.

- Once Brazil and Argentina recover from their current recessions, they will provide the United States with stiffer competition in soybean export markets.

- In an 11th hour decision, Costa Rica has balked at entering the CAFTA, claiming that the United States wants too much in the way of removing barriers to foreign competition in Costa Rica's telecommunications and insurance businesses. It is unclear whether ongoing negotiations to include this important Central American country in the CAFTA will be successful.

- The mad cow outbreak will sharply curtail U.S. beef exports at least in fiscal 2004. However, an anticipated increase in U.S. pork and poultry exports will reduce the impact of the fall in U.S. beef exports on aggregate U.S. agricultural exports.

The bottom line is that, just as in the past, the opportunities for expanded U.S. agricultural exports will be determined primarily by crop and livestock production conditions in foreign countries. Countries prefer to produce their own food and will do so if conditions permit. Governments typically encourage self sufficiency in food production even though their countries may not be efficient food producers.

The Evolution and Current Status of Livestock Production and Meat Processing in Wisconsin

Patrick Luby (608) 262-6974

The livestock and meat processing industries are an important part of Wisconsin agriculture. Cash receipts from the sale of Wisconsin meat animals totaled about $750 million in 2002, accounting for 13.5 percent of the total receipts from farm marketings. Poultry and egg sales added another $220 million, while miscellaneous livestock sales contributed $140 million. Combined with the value of livestock used for home consumption, the total farm value of Wisconsin livestock in 2002 was about $1.1 billion.

The value of Wisconsin livestock is likely to reach nearly $1.3 billion in 2003 due to higher prices of most livestock and poultry. Most Wisconsin livestock is slaughtered and processed within the state, adding additional economic value through the multiplier effect.

The livestock and meat industries have changed considerably since World War II. What follows is a brief look at those changes and at how Wisconsin stacks up against other states. The focus is primarily on red meats. While turkeys and broilers are important in Wisconsin, USDA does not report certain Wisconsin data because of disclosure restrictions.

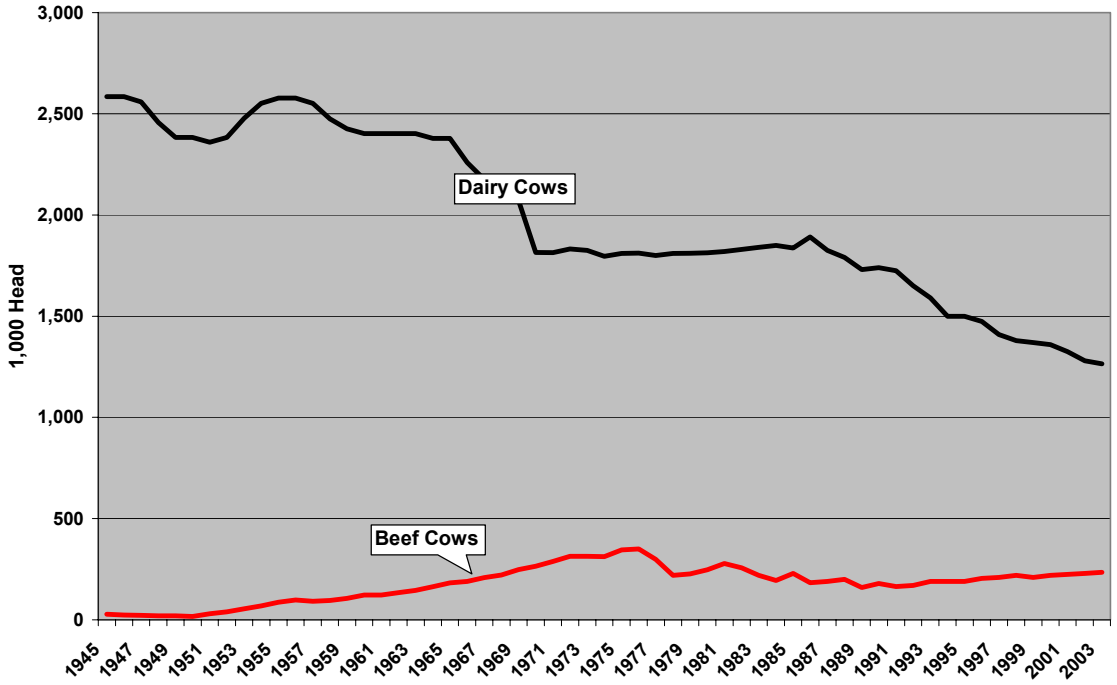
Wisconsin Cattle

Wisconsin's total milk production has been essentially stagnant since the late 1980s, despite the fact that productivity per dairy cow has increased substantially. This reflects a steady decrease in the number of dairy cows in the state. From 1965 to present, dairy cow numbers have fallen from 2.37 million to 1.26 million, a drop of 41 percent. Even so, Wisconsin still ranks a strong second (to California) in dairy cow numbers.

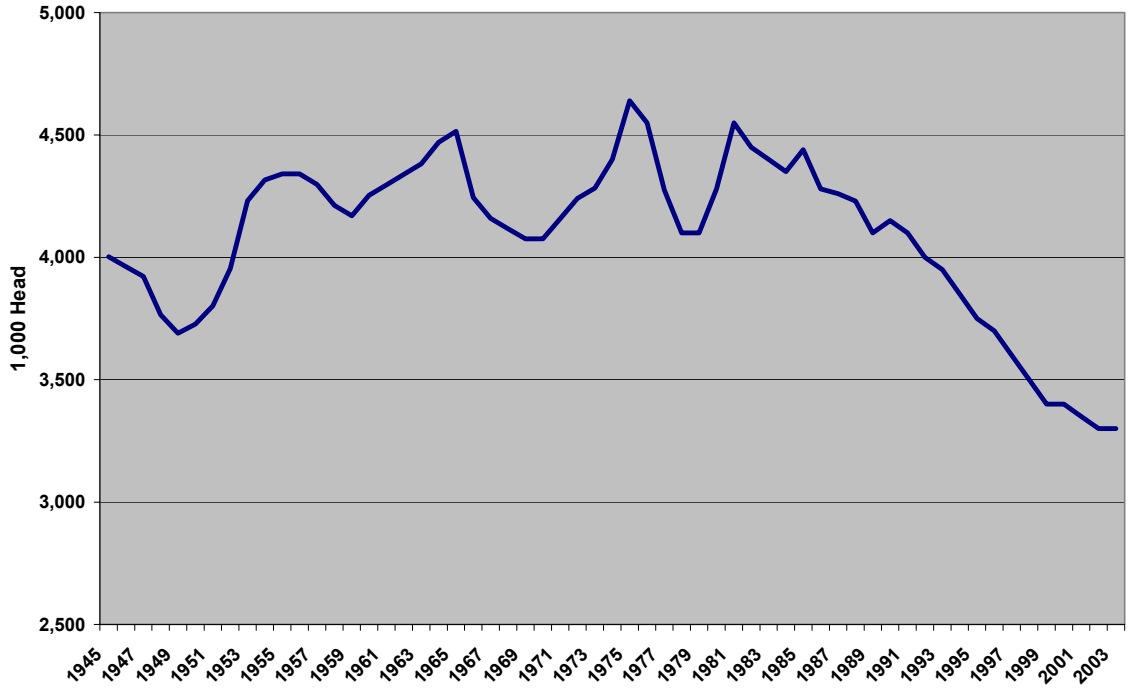
While dairy cows still dominate, the total number of beef cows on Wisconsin farms has been increasing. Beef cow numbers rose from 165,000 in 1991 to 235,000 in 2003, an increase of 42 percent in the last 12 years.

The total number of all cattle and calves in Wisconsin fell from 4.6 million in 1981 to 3.3 million in 2003, a 27 percent decline in 22 years. Wisconsin ranks tenth in the country in the number of cattle and calves on farms.

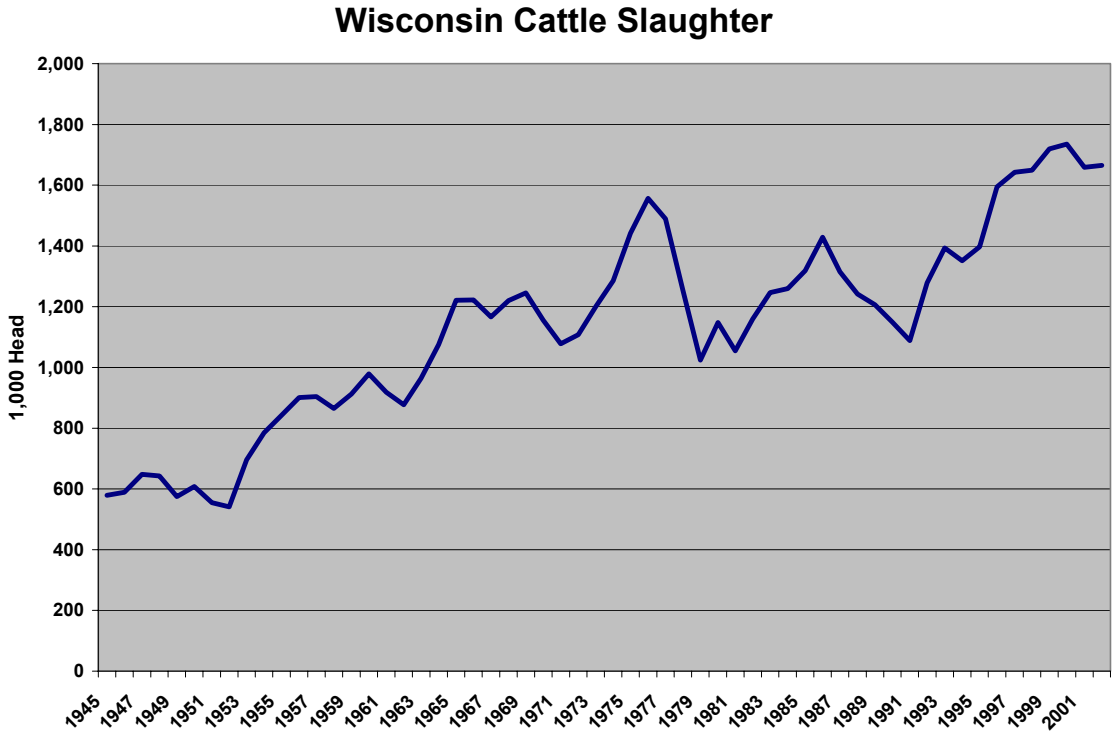
Wisconsin Dairy and Beef Cows, January 1 Inventory



Total Wisconsin Cattle and Calves on January 1

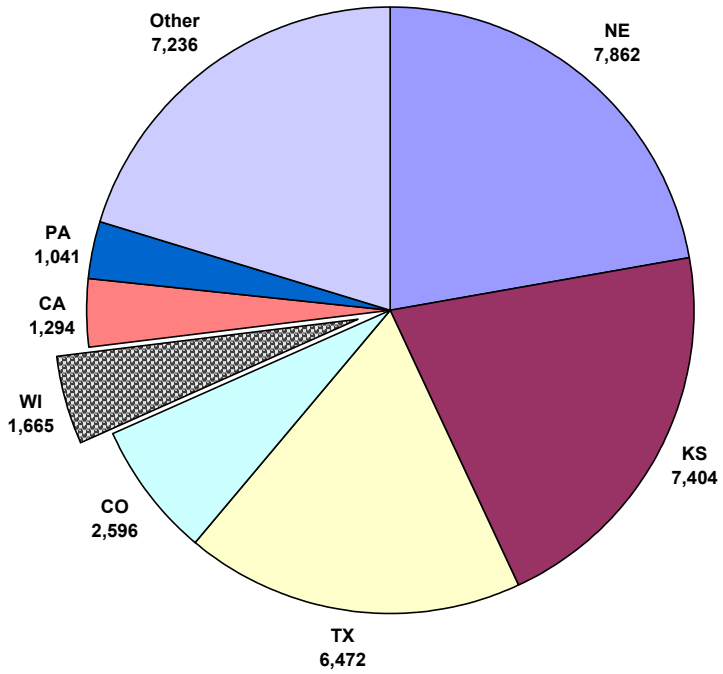


Despite the decline in total cattle and calves, the number of cattle slaughtered in Wisconsin has risen, up from 1.1 million in 1991 to 1.7 million in 2002, an increase of 53 percent in 11 years. Total U.S. cattle slaughter rose only 8 percent during that time. Wisconsin's cattle slaughterers have imported more cattle from other states during the last decade and grew their share of U.S. cattle slaughter from 3.4 percent in 1991 to 4.7 percent in 2002, when the state ranked fifth in cattle slaughter. The big four states in cattle slaughter — Nebraska, Kansas, Texas and Colorado — accounted for over 60 percent of the U.S. total in 2002. Most of the slaughtering plants in these states are very large, specializing in the slaughter of steers and heifers from large feedlots in the Central and Southern Great Plains.



In 2002, Wisconsin ranked first in the slaughter of dairy cows, fourth in the slaughter of beef cows and first in the slaughter of all cows. Wisconsin slaughtered over one-fourth of all dairy cows, 7 percent of all beef cows and more than 15 percent of all U.S. cows. With an important assist from the dairy steer feeding industry in the state, Wisconsin ranked fifth in the slaughter of steers in the United States in 2002.

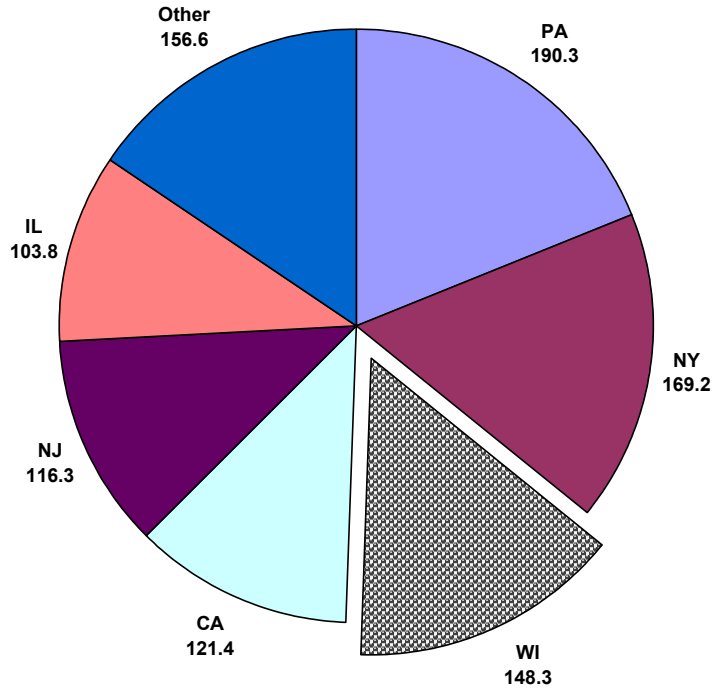
Cattle Slaughter by State, 2002 (1,000 Head)



Slaughter Cattle by Type, Wisconsin and U.S., 2002				
Species	***Wisconsin***	***United States***	***Wis. As % of U.S.***	***Wisconsin Rank***
	1,000 Head			
Steers	658	17,522	3.8	5
Heifers	54	11,342	0.5	12
Dairy Cows	669	2,607	25.7	1
Other Cows	214	3,051	7	4
Total Cows	883	5,658	15.6	1
Bulls and Stags	30	598	5	9
TOTAL	*1,625*	*35,120*	*4.6*	*5*

Wisconsin accounted for over 14 percent of U.S. calf slaughter in 2002, ranking third in the country. The big six states of Wisconsin, Pennsylvania, New York, California, New Jersey and Illinois accounted for more than 82 percent of the total. Because of the higher average weight of calves slaughtered in Wisconsin, it led the country in the total weight of calves slaughtered, slightly exceeding 20 percent of the total.

Calf Slaughter by State, 2002 (1,000 Head)



Size of U.S. Federally-Inspected Cattle Slaughtering Plants, 2002

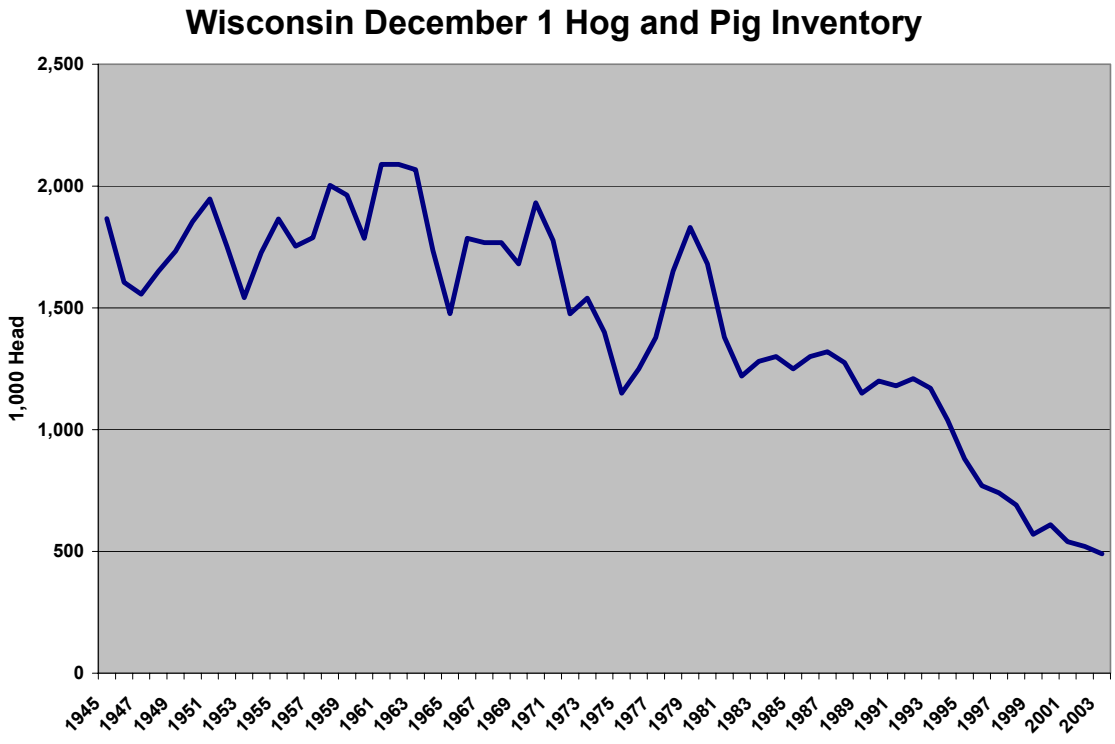
Number of Head Slaughtered	*No. of Plants*	*1,000 Head Slaughtered*	*Percent of U.S.*	*Cumulative Percent*
1.5 million and larger	2	3,446	9.9	9.9
1.0 to 1.5 million	13	16,446	46.8	56.9
500,000 to 1.0 million	8	4,774	13.6	70.3
300,000 to 499,999	11	4,600	13.2	83.5
200,000 to 299,999	9	2,246	6.4	89.9
100,000 to 199,999	14	1,945	5.6	95.5
50,000 to 99,999	7	488	1.4	96.9
10,000 to 49,999	28	661	1.9	98.7
1,000 to 9,999	85	276	0.8	99.5
1 to 999	529	169	0.5	100.0
TOTAL	*706*	*35,051*	*100.0*	

Hogs

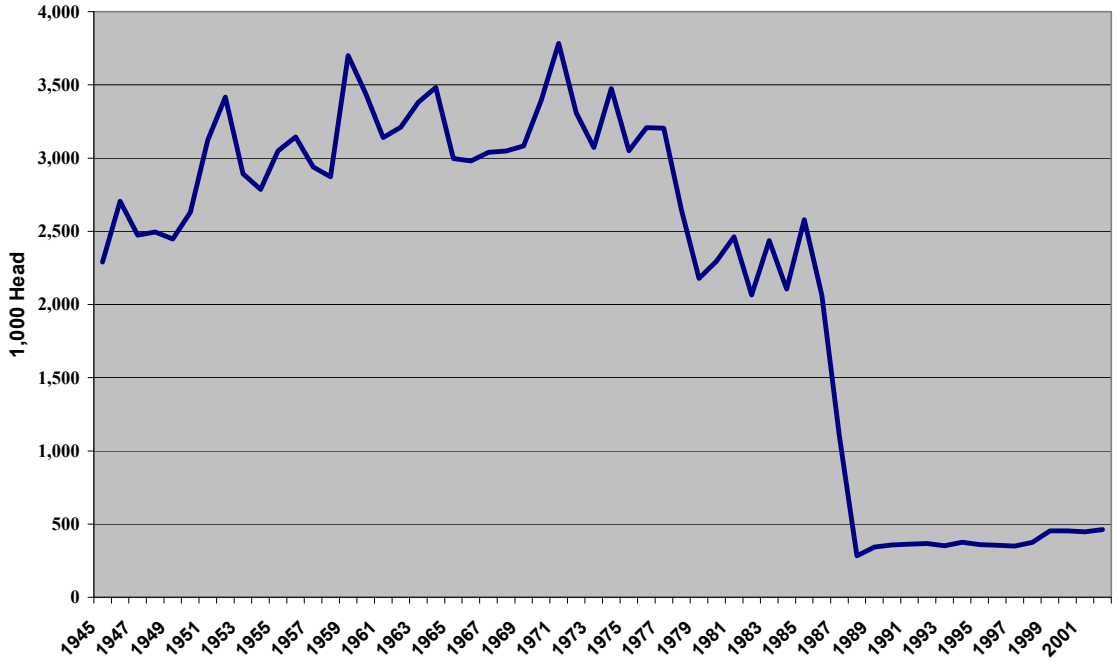
The number of hogs on Wisconsin's farms has declined by more than 75 percent since 1963, with the downtrend picking up speed after 1979. In 2003, there were 490,000 hogs on Wisconsin farms. In 1963, there were 2 million. Wisconsin farms had more than 4 percent of U.S. hogs for many years following World War II, but now account for fewer than 1 percent.

The number of hogs in Wisconsin declined 12 percent in the 16 years from 1968 to 1984, fell 36 percent in the next 14 years to 1993, and declined 58 percent in the last 10 years. This reflects rapid consolidation in the U.S. hog industry, with fewer and much larger producers operating in fewer, very dense hog production areas.

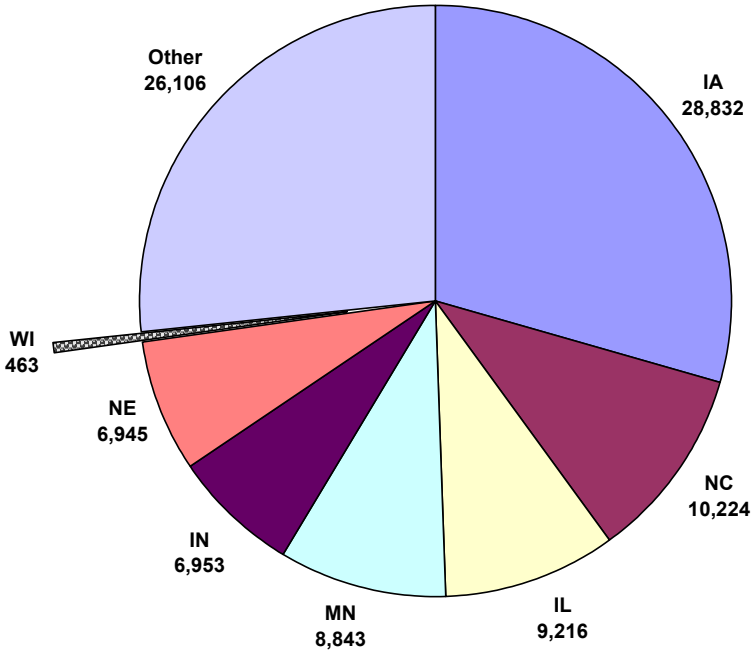
As hog production in Wisconsin has declined, so has the state's hog slaughtering industry. There were four major slaughtering plants in Wisconsin with a combined annual slaughter of 3 million to 4 million hogs from the 1950's to 1978 when Oscar Mayer terminated its hog slaughtering operations in the state and began concentrating on processing meat obtained from other packers. In the late 1980s, three more large meat companies followed suit: Hillshire Farms, Patrick Cudahy, and Jones Dairy Farms. Annual slaughter in the state subsequently dropped below 400,000 per year.



Wisconsin Hog Slaughter



Hog Slaughter by State, 2002 (1,000 Head)



During the 1980's and 1990's the national trend was toward much larger plants, often with double-shift capacity. By 2002, the nation's largest 13 plants slaughtered more than 3 million hogs each. Together these plants slaughtered more than 56 million hogs, or 57 percent of the U.S. total. Wisconsin's older and smaller plants, facing higher operating costs per hog and a declining supply of hogs, were not competitive.

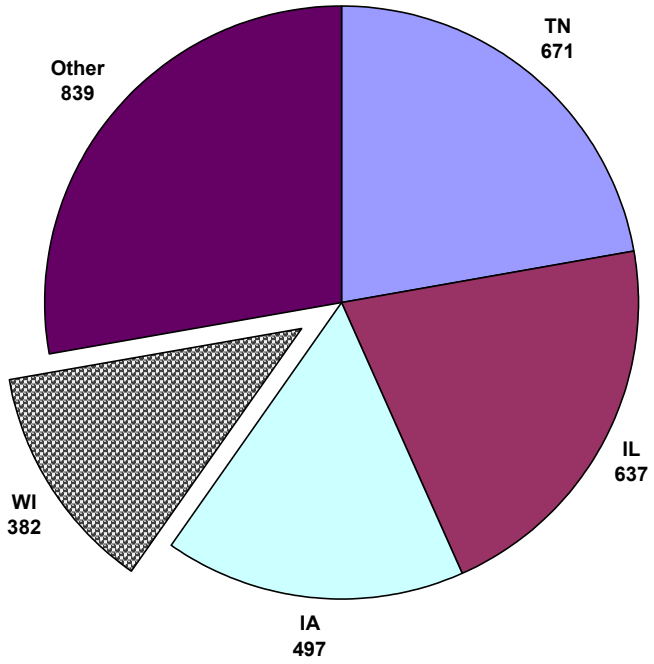
As the hog production industry has increased productivity over the last half-century, it has required fewer breeding stock. As hogs have become meatier and larger, and producers have been able to produce many more pigs per sow per year, fewer sows have been available for slaughter. Sows now account for only about 3 percent of total hog slaughter, less than half of the percentage a half-century ago.

Sow slaughter has consolidated into fewer plants in recent years. Many newer, larger plants do not slaughter sows. The development of hot boning techniques for use in specialized sausage products has also hastened the trend toward fewer, more efficient sow slaughtering plants. In this environment, Wisconsin has become the fourth largest sow slaughtering state with 12 percent of the total in 2002. It ranks behind only Tennessee, Illinois and Iowa. With less than 1 percent of total U.S. sows, Wisconsin slaughterers import more than 90 percent of their sows from other states.

Size of U.S. Federally-Inspected Hog Slaughtering Plants, 2002

Number of Head Slaughtered	*No. of Plants*	*1,000 Head Slaughtered*	*Percent of U.S.*	*Cumulative Percent*
4 million and larger	9	42,448	43.1	43.1
3 to 4 million	4	13,806	14.0	57.1
2 to 3 million	8	17,923	18.2	75.3
1 to 2 million	8	13,491	13.7	89.0
0.5 to 1 million	5	3,722	3.8	92.8
250,000 to 499,999	8	2,393	2.4	95.2
100,000 to 249,999	10	1,475	1.5	96.7
10,000 to 99,999	69	2,728	2.8	99.5
1,000 to 9,999	129	339	0.3	99.8
1 to 999	433	148	0.2	100.0
TOTAL	*683*	*98,473*	*100.0*	

Sow Slaughter by State, 2002 (1,000 Head)



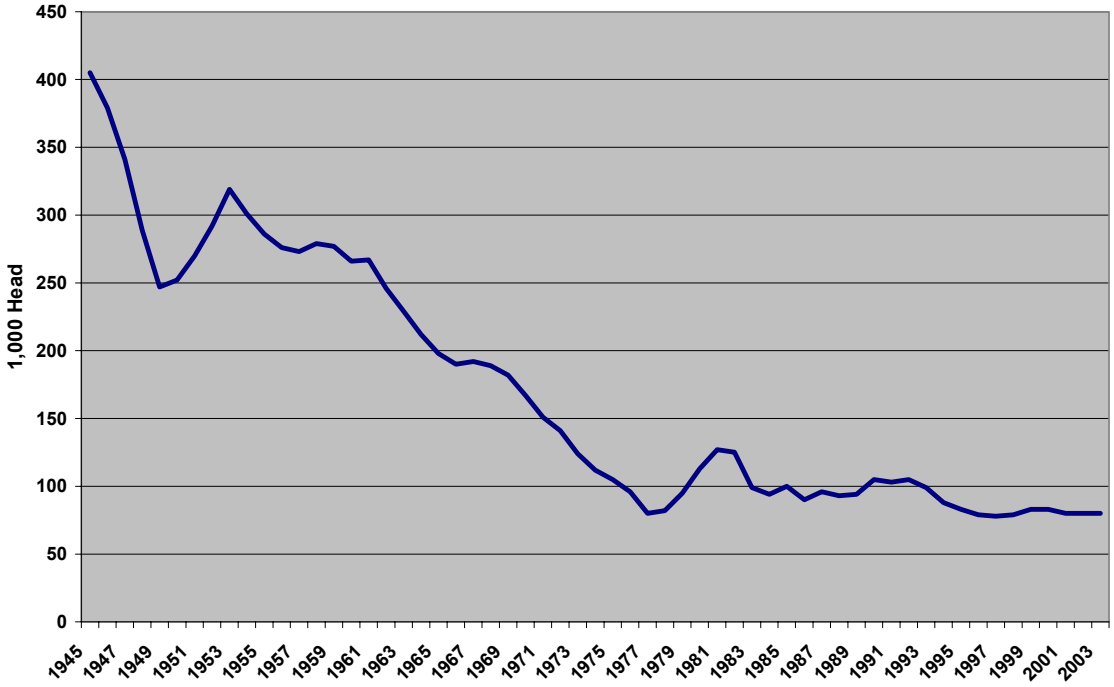
Sheep and Lambs

During the last nine years, the number of sheep and lambs on Wisconsin farms has remained at about 80,000 head. Wisconsin's sheep and lamb population declined from about 400,000 at the end of World War II to less than 100,000 by the late 1970's, mirroring the trend in many other states. The state ranks 16th in commercial lamb slaughter, with less than 0.5 percent of the U.S. total.

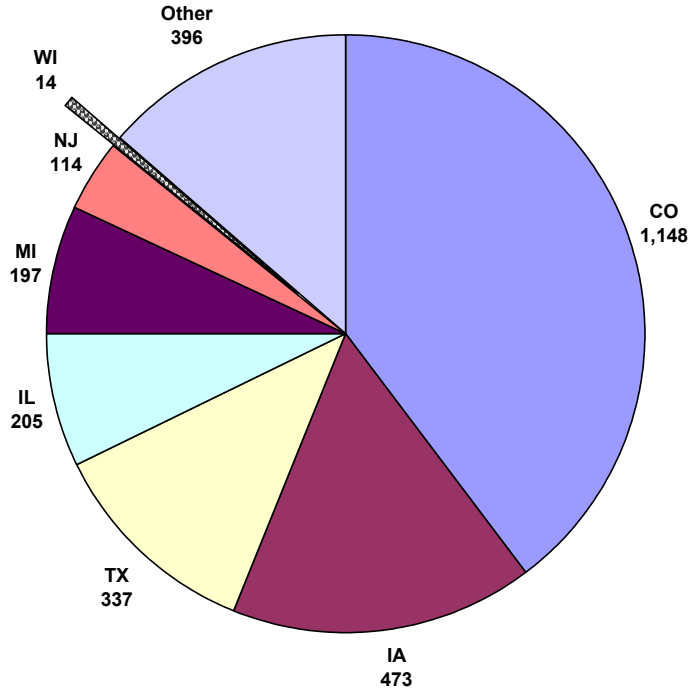
Poultry

While Wisconsin's poultry industry is modest in size compared with that of many other states, it makes a significant contribution to the state's agricultural and food sector. Production and processing of turkeys, broilers, eggs, ducks and other fowl contribute to the variety and quality of food produced here. Wisconsin ranks 19th in the production of both broilers and eggs. In 2002, cash receipts from the sale of poultry and eggs accounted for over $220 million, nearly 23 percent of the state's total livestock-related farm cash receipts and over 4 percent of the total cash receipts from all commodities marketed from Wisconsin farms.

Wisconsin December 1 Sheep and Lamb Inventory



Sheep and Lamb Slaughter by State, 2002 (1,000 Head)



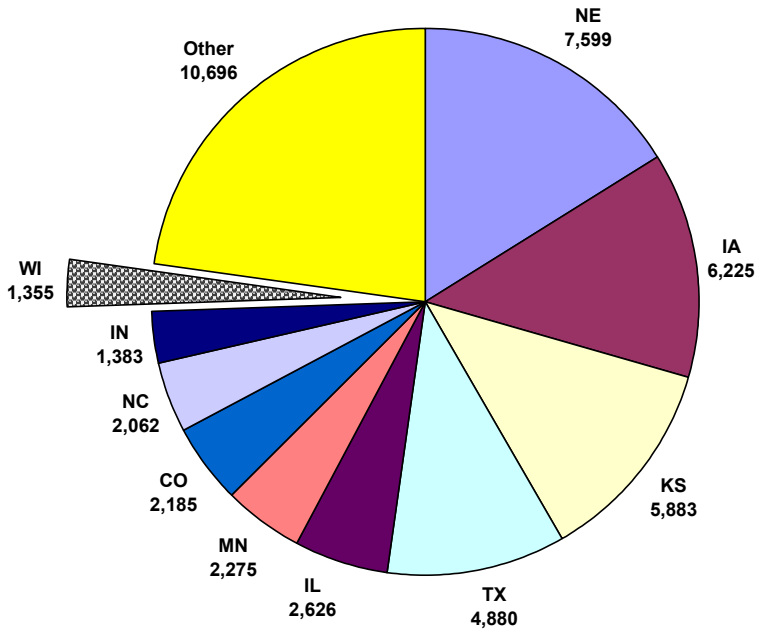
Meat Processing

Wisconsin is an important meat processing state. In 2002, meat processing and animal slaughtering plants employed more than 18,000 people with an annual payroll of more than $624 million. Many large processing plants have national distribution, while smaller and mid-sized plants have regional, state and local markets. Many of the larger plants got their start as integrated hog slaughtering and meat processing plants back when the hog production industry in Wisconsin was much larger than it is today. These large processing plants now acquire most of their meat for processing from out-of-state slaughtering, cutting and meat boning plants.

At the beginning of 2003, Wisconsin had 16 federally inspected livestock slaughtering plants — those authorized to ship meat across state lines — about 2 percent of the U.S. total of 879. Wisconsin also has nearly 300 state-inspected meat processing plants. Of these, 101 were authorized to slaughter animals. This is about 4 percent of the U.S. total of 2,354 state-inspected slaughtering plants.

Wisconsin is tied for sixth place in the number of state-inspected meat slaughtering plants, behind Pennsylvania, Iowa, Montana, Ohio and Minnesota. Fortunately, Wisconsin plants have a sizable in-state market of nearly 5.5 million people. The Wisconsin Meat Inspection Service is held in a very high regard among its peers.

Total Red Meat Production by State, 2002
(Million Pounds)



Livestock Slaughter Plants by State, January 1, 2003
(Federal and State Inspected)