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Staff Paper

2005 Annual Agricultural Outlook

Coordinated by Jim Hilker

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Department of Agricultural Economics
MICHIGAN STATE UNIVERSITY
East Lansing, Michigan 48824

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2005 Annual Agricultural Outlook

Coordinated by

**Jim Hilker
hilker@msu.edu**

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THE GENERAL ECONOMY

Les Manderscheid and Bob Myers

Both the U.S. and Michigan economies experienced significant economic growth in 2004. But while the U.S. economy grew by about 4.5%, the Michigan economy had less than 3% growth in personal income and actually lost wage and salary employment. Inflation and interest rates remained low, however, interest rates began to move up at the end of the year as the Federal Reserve raised the Federal Funds rate.

Looking at growth in particular sectors gives some insight into why the Michigan economy has been performing worse than the national average. In the Government, Trade, Transportation and Utilities, Financial Activities, and Natural Resources and Mining sectors, the national economy showed job growth while the Michigan economy showed job losses. These four sectors account for about 39% of Michigan's wage and salary employment so our relatively poor performance in these sectors explains a significant portion of our overall relatively poor performance. The Manufacturing and Information sectors showed job declines both nationally and in Michigan, but Michigan had larger declines. These two sectors account for about 18% of Michigan's employment. In the Professional and Business Services, Education and Health Services, Leisure and Hospitality, and Construction sectors, job growth occurred in both the Michigan and national economies, however, growth in Michigan was at a lower rate than in the U.S. as a whole. These four sectors account for about 39% of Michigan's jobs. Only in the Other Services sector did Michigan's employment grow faster than the U.S., and that sector accounts for only about 4% of Michigan's employment.

What will 2005 bring? Most forecasters expect continued growth in the U.S. economy. For example, Saul Hymans, University of Michigan, forecasts a 3.7% growth rate for the national economy for 2005. Other forecasters vary, however, the consensus is for growth of 3-4% in real output of goods and services.

There are two factors that cloud the forecast. Oil prices have been volatile but generally increasing. If oil prices continue near or above \$50 a barrel, growth may be slowed significantly in the U.S., and also in Europe and Asia.

The twin deficits (trade and federal budget) have resulted in a fall in the value of the dollar and that trend is forecast to continue into 2005. In the late 1980's the quarterly U.S. trade deficit (current account) was \$150 billion or 3.5% of GDP. In the second quarter of 2004 it was \$630 billion or nearly 5.5% of GDP. Will the dollar continue to decline in an orderly manner? If yes, our exports will gradually increase and imports decline. While this puts upward pressure on U.S. prices, it also makes our exports more competitive. This can provide real benefits to export oriented sectors such as agriculture.

If the U.S. dollar should go into freefall, this could spell trouble for the U.S. economy. *The Wall Street Journal* recently reported that the United Nations and the International Monetary Fund have warned that the twin U.S. deficits are putting the global economy off-balance. Industrialized countries, especially Japan, and Europe, were urged to help by spurring faster growth in their economies. The warnings followed the announcement by the nonpartisan Congressional Budget Office of a \$427 billion budget deficit for the current fiscal year. This deficit reflects the increased military spending requested in late January.

What happens if countries holding large reserves of U.S. treasuries, stocks, and bonds decide to liquidate these assets quickly, thus precipitating a rapid decline in the dollar? There could be volatility in our markets that would disrupt growth and lead to calls for drastic action by the Federal Reserve System and the Federal government. We believe that the probability of this development is very small, but one should be aware of the danger.

In summary, we expect continued growth in the national economy with modest inflation, an orderly decline in the value of the dollar, an orderly but steady increase in interest rates, and a small reduction in the unemployment rate. The structure of the Michigan economy suggests that it will lag again in 2005. The University of Michigan forecast for the Michigan economy suggests that the employment peak that occurred in the second quarter of 2000 now may not be regained until 2007.

TRADE OUTLOOK

**David B. Schweikhardt, Associate Professor, and
Sandra S. Batie, Elton R. Smith Professor of Food and Agricultural Policy**

The continued slow growth of the worldwide economy, combined with a continued worldwide production and changing consumer preferences, are expected to dominate the outlook for U.S. agricultural trade again in 2005. These conditions will limit the growth in worldwide demand for agricultural exports, including U.S. exports, while changing consumer preferences will likely result in a record level of U.S. imports in 2005.

U.S. Agricultural Trade Outlook

Total U.S. agricultural exports are expected to decrease from a record of \$62 billion in 2004 to \$56 billion in 2005. This decline is expected due to large worldwide crop production, decreased prices for feed grains and soybeans, and continued slow economic growth in some markets. Changes in export volumes are expected to be mixed for several commodities compared to 2004. For example, the export volumes of corn and soybeans are expected to decline slightly steady in 2005. Pork exports are expected to remain steady in 2005, while poultry and dairy export volumes are expected to remain steady to slightly higher. The volume of beef exports are likely to remain limited by the BSE event.

The total value of U.S. agricultural exports (\$56 billion) is expected to return to its 2003 level after a record year of \$62 billion in 2004. The largest category of U.S. exports is expected to remain the grains and feeds category (\$15.1 billion), followed by horticultural products (\$13.8 billion), oilseed products (\$8.8 billion), livestock products (\$6.9 billion), poultry products (\$2.6 billion) and dairy products (\$1.3 billion). Only horticultural products and dairy products are projected to experience increases in the value of exports.

The destination of U.S. exports continues to evolve, with an increasing share of U.S. exports being sold to countries of the Western Hemisphere. The Western Hemisphere countries are also proving to be more stable markets for U.S. agricultural products. The Western Hemisphere (\$22.3 billion) is projected to gain a larger lead over Asia (\$20.5 billion) as the largest regional market for U.S. exports. U.S. agricultural exports to Asia are expected to experience a decline of nearly \$3.8 billion, while U.S. exports to Western Hemisphere countries are expected to decline by only \$800 million in 2005.

For the first time in recent history, U.S. exports to Canada (\$9.7 billion) and Mexico (\$8.0 billion) surpassed U.S. exports to Japan (\$7.7 billion), and became the largest two customers for U.S. agricultural exports. Mexico surpassed Japan to become the second largest market for U.S. agricultural exports in 2004, and could soon surpass Canada to become the largest single buyer of U.S. agricultural exports. This trend continues the growth of U.S. agricultural exports to the Western Hemisphere since the implementation of the North American Free Trade Agreement (NAFTA). U.S. exports to Mexico were \$3.6 billion in 1993, the year prior to the approval of NAFTA, and have increased in each of the last nine years. In addition, U.S. agricultural exports to Mexico are now greater than the value of U.S. exports to the entire 25 countries of the European Union (projected at \$6.5 billion in 2005).

Total U.S. agricultural imports are expected to increase to \$56 billion in 2005, a level \$3.3 billion higher than 2004. Horticultural product imports are expected to experience the largest change, with an increase of \$1.9 billion to a projected total of \$24.8 billion. The European Union (\$12.4 billion), Canada (\$11.7 billion) and Mexico (\$7.5 billion) are projected to continue as the three largest suppliers of U.S. agricultural imports.

Implications of the U.S. Agricultural Trade Outlook

A recent USDA report on the agricultural trade outlook concluded that “expected U.S. agricultural trade hovers between a surplus and a deficit, as it last did in the late 1950s.” Such a conclusion leads to a logical question: Is U.S. agricultural facing some sort of fundamental change in international markets, and if so, is that change of a short-term or a long-term nature?

In 2005, the trade outlook will likely be driven by three fundamental factors: rising world agricultural production, a weakening U.S. dollar, and changes in consumer preferences. The increase in agricultural production in domestic and foreign markets will probably slow export growth in 2005 and in the near-term future. While the declining value of the U.S. dollar may have little effect in the very short-run, dramatic changes in exchange rates over a longer period of time can effect trade patterns. Between 2001 and September 2004, the trade-weighted value of the dollar (weighted according the currencies of the countries in which the U.S. exports agricultural products) declined from a high in 2001 of 107.3 to a low 94.8 in September 2004. Recent USDA projections indicate that the index will continue to decline to 81.1 in 2005. If this trend toward a weaker dollar continues in the foreseeable future, it will eventually cause a decrease in the prices paid by foreign buyers of U.S. agricultural exports and an increase in the prices paid by U.S. consumers for imported agricultural products. Over the long-term, it could be expected that such a change would increase U.S. exports and decrease U.S. imports.

Alongside these changes in exchange rates, however, may be an even more powerful force causing changes in world agricultural trade: that of changing consumer dietary preferences. As the obesity problem continues to increase in the United States and other high-income countries, many consumers are turning to higher consumption of fruits and vegetables. This change may explain a large portion of the recent increase in U.S. agricultural imports. For example, U.S. imports of horticultural products increased from \$15.8 billion in 2000 to a projected total of \$24.8 billion in 2005. This increase of \$9.0 billion in five years may signal a fundamental shift in consumers’ buying habits – a shift that will run deeper, and prove more permanent, than any short-term changes in other factors. If this is so, such a shift is a major signal to every part of the U.S. farm and food industry: Rapid market change could be underway driven by the most irresistible market force of all – consumers who are redirecting their buying power.

Table 1. Value of Total U.S. Agricultural Exports and Imports.

	Billions of dollars	
	Exports	Imports
1997	57.4	35.7
1998	53.7	36.8
1999	49.1	37.3
2000	50.7	38.9
2001	52.7	39.0
2002	53.3	40.9
2003	56.2	45.6
2004	62.3	52.7
2005	56.0	56.0

FARMLAND VALUES CONTINUE TO RISE

Eric Wittenburg, Mary Schulz and Steve Hanson

Michigan farmland values generally posted impressive gains again in 2004, continuing their string of year-to-year increases. The annual land value survey conducted in spring 2004 by the Department of Agricultural Economics at Michigan State University collects information on the value of different types of Michigan land and found average farmland values to be:

Tiled field crop land	\$2,466 per acre (up 8.9%);
Untiled field crop land	\$2,122 per acre (up 9.2%);
Sugarbeet land	\$2,361 per acre (up 7.8%);
Irrigated land	\$2,615 per acre (up 9.4%); and
Fruit Trees	\$3,411 per acre (up 8.9%).

Consistent with the MSU study, the Federal Reserve Bank of Chicago reported a 9% increase in Michigan land prices from October 1, 2003 to October 1, 2004. And the USDA reported in its "Agricultural Land Values and Cash Rents" reported that Michigan's agricultural crop land prices have increased over 8.5% during the 2003 calendar year to an average price of \$2,550 per acre. Last year's gains marked the 17th straight year of increases in the average value of Michigan farmland values. According to USDA statistics, the last time farmland values in Michigan experienced a year-to-year decline was January 1987.

Cash rent rates rose slightly last year. Forty-six percent of total crop acres were controlled through leasing arrangements, with 74% of the leased land operated using cash leases. The average cash rent levels in the state were:

Tiled field crop land	\$85 per acre;
Untiled field crop land	\$64 per acre;
Sugarbeet land	\$121 per acre; and
Irrigated land	\$127 per acre.

Additional details on land values and cash rents across the state are reported in Department of Agricultural Economics Reports which can be found on the web at www.aec.msu.edu/agecon/aecreports.

Michigan farmland values are influenced by both the agriculture and non-agriculture sectors. Michigan agriculture is very diverse but major commodity crops along with livestock continue to play an important role in determining the value of farmland in many areas of the state. Strong crop yields and solid earnings for dairy and hog farmers in 2004 helped drive farmland values up. And, projected strength in 2005 should continue to pressure land prices upward. Longer-term concerns continue revolve around the large contribution of government payments to net farm income and the reliance on these payments to remain economically viable in the presence of relatively high and rising land prices (the present Farm Bill runs through 2007).

Michigan farmland prices are also heavily dependent on the non-agriculture sector. Interest rates have risen slightly but still remain at historically low levels. Michigan's economy has lagged behind the strengthening general economy but will likely follow the national trend increasing non-farm income. This has two primary effects. First many farmers and/or spouses rely on off-farm income to supplement farm income thereby indirectly affecting the amount farmers are able to pay for land. And second non-farm income growth influences the already strong demand for land to transition from farming to non-agriculture uses such as residential development, recreational uses, and commercial development. The value land for non-agricultural uses can substantially exceed its agricultural-use value. For example, the MSU study found the average non-agricultural-use value for undeveloped land in Michigan to be \$9,494 per acre for residential development, \$29,431 per acre for commercial/industrial development, and \$4,434 per acre for recreational development. The relatively high value of land for non-agricultural uses tends to significantly increase the value of farmland today simply based on the possibility that it might be developed at some point in the future.

Given the general strength in the agriculture sector, an improving state and general economy, relatively low interest rates, and continued demand to convert land to non-agriculture uses, look for farmland prices in Michigan to continue their upward trend in 2005 although probably at a more modest rate than in 2004. Of course, you can expect to see some regional variation in the growth rate of farmland values depending on which commodity provides the major source of income in region as well as the strength of non-farm economy in the region.

2005 ANNUAL OUTLOOK FOR CORN, WHEAT, AND SOYBEANS

Jim Hilker

Corn

The humongous 2004 corn crop will be the biggest market factor until at least planting time. And, if we have a normal 2005 corn crop, supply will continue to dominate the market over the next 18 months. However, the strong demand for corn will greatly temper the situation. While this annual corn outlook will give my best analysis for the next year and a half, it must be remembered that there is a whole distribution of possible prices. The numbers behind this outlook for the 2004-05 and 2005-06 corn marketing years are shown in the Supply/Demand Balance Sheet, Table 1.

The record total supply for the 2004-05 corn marketing year was made up of fairly tight beginning stocks, record production, and the normal small amount of imports. The record crop came from the most acres of corn being planted and harvested since 1985 and a record yield, 18 bu./acre higher than the previous record which was set just the year before. The previous record for corn production was also set in 2003. This gave us consecutive record corn crops. And, if we have a trend in 2005, we will produce our second largest corn crop on record, and we may set a new record for total supply, see Table 1.

That's the bad news. On the demand side, use in 2004-05 and 2005-06 will be quite strong and should keep us from having four straight years of below \$2.00 corn as we saw from 1998-2001. Feed use is expected to be up 4% in 2004-05 as we will have a few more hogs, a few more U.S. cattle on feed, a few more feeders from Canada, a few more broilers, a few more milk cows, and heavier weights of all slaughter animals.

Food, seed, and industrial use is expected to be up 10%, almost entirely due to the 22% increase in corn used for ethanol production. The increase in expected use is due to primarily continued increased need for oxygenated gas to fulfill the Clean Air Act, and the high oil prices. Neither of those two reasons are likely to go away quickly. The ethanol production plants to produce this amount of ethanol are already built, or will be built, in time to produce ethanol this marketing year.

Exports are expected to be up just under 3%. This may not sound like much, but it must be remembered that the rest of the world harvested a record coarse grain crop for 2004-05. When you can sell more to the rest of the world, when they have more, is a sign of strong demand brought on by economic growth. The record use figure shown on Table 1 for 2004-05 is extremely helpful, but only offsets 35% of the increase in total supply.

This leaves us with projected ending stocks of 1,985 million bushels, over twice the amount of the previous year. This is an 18.4 stocks-to-use ratio. My model would indicate an average annual weighted price for 2004-05 of \$1.90/bu. On top of that, average prices to date have averaged over \$2.00 if you start with September 1 and forward sales and include the pre-harvest prices that were received at harvest. This doesn't put an optimistic number on the rest of the year's prices without a weather scare.

While the crop marketing year officially starts September 1, in a way we really start the 2005-06 crop year when the March 1 planting intentions are released the end of March and we begin to plant corn in April. I expect planted corn acres to be up a little over 2 million acres this year for three reasons. One reason is the relatively better corn yields versus soybean yields we have seen over much of the Corn Belt the past three years. Some of that may be offset by the higher nitrogen prices, but that may be offset by the expectations of higher spraying costs for soybean, perhaps Asian rust, and/or aphids. A second reason is some soybean acres will be switched to corn in areas where the chance of Asian rust is the highest, or because producers just don't want to take the chance. The third reason is that 1.8 million fewer acres of winter wheat were planted, and 830,000 of those acres not planted were in Ohio, Indiana, Illinois, Missouri, and Wisconsin, all big corn states.

The trend yield using corn yields from the past 27 years would be 143 bu./acre. Adding 2.1 million corn acres to the 2004 total would give us 83 million planted acres of corn in 2005. If you subtract the average 7.2 million acres of corn for silage and corn not harvested due to damage, you have 75.8 million acres of corn to be harvested for grain. You multiply 143 bu./acre times 75.8 million acres and you have the second largest corn crop on record at 10,839 million bushels. If this takes place, the three production figures you see for the three years in Table 1 will be the three largest on record. And, will leave us with the largest total supply on record.

Will use once again pull us out? Odds are high that it will, to a large degree, but the rest of the world's coarse grain crop will once again play a large role. The numbers in Table 1 assumes a normal yield for the rest of the world and continued economic growth. We will once again see a gain in feed use, but it will likely be marginal, as livestock production will grow marginally. I doubt weights will gain much on top of this year's anticipated gains. It also must be remembered that for every bushel of corn used for ethanol there is about a third of a bushel left over for feed. This residual is, in a very rough sense, about half for energy and about half for protein.

Feed, seed, and industrial use for 2006-06 is forecast to increase just under 7%, again led by at least a 12% gain in corn use for ethanol. There are still areas that need it for clean air reasons as well as the assumption oil prices will stay high and the subsidies will stay in place. The plants needed to produce this increase are already being built or are far along in their planning.

Exports may be the key. I expect U.S. corn exports to be up about 100 million bushels. This is based almost solely on China having both a normal crop and continuing to increase their use. This would mean they would have about 2.5 MMT, or 100 million less bushels, to export. Even with the huge 2004 rest of the world crop, rest of the world 2004-05 ending stocks are not expected to increase. We will have the extra stocks. A normal trend rest of the world crop in 2005-06 would be smaller than the 2004-05 world coarse grain crop. Therefore, my projected increase U.S. corn exports could be considered conservative.

If there is any good news in this outlook, it is that after three huge corn crops in a row, two for real and one projected, ending stocks are projected to be lower in the third year than the

previous year, as shown in Table 1. An ending stocks to use ratio of 15.4, would give us an average annual price of \$2.05. However, there is about a 20% chance that the annual prices could be under \$1.70 and a 20% chance prices could be over \$2.50. All that would have to happen for the low prices scenarios is to have the U.S. and world crop be 4-8% bigger than expected, and to have the high prices scenario is to have the world crop 4-8% smaller than expected.

Wheat

As can be seen in Table 2, I expect the 2005-06 wheat marketing year to be much like the 2004-05 wheat marketing year -- which ends May 31. The U.S. Planted Acres were down 2.4 million acres last year and I expect them to be down 1.6 million acres for 2005. The *December Winter Wheat Seeding Report* showed winter wheat acreage will be down 1.8 million acres, however, I expect the spring wheat acres to be up a little. Michigan winter wheat acres were down only 10,000 acres, 1.6%, at 650,000 acres.

The 2004 wheat yield was the second highest on record, a bushel below the 2003 record. The trend yield for 2005 would be 42 bu./acre. However, I am using 43.5 bu./acre in my forecast as seen in Table 2. The reason for this is the last wheat crop progress report, released in December, showed winter wheat in much above average condition, and the word is that, for the most part, the conditions haven't changed and soil moisture coming into spring will be good. That is not to say we can't have a poor crop.

Even with the good yield last year, 2004 production was down due to less acres. The same is expected to be true for 2005. As can be seen on Table 2, total supplies for 2004-05 and 2005-06 are expected to be about the same, 2005-06 will have a little bigger beginning stocks, and a little smaller production.

Domestic use for 2004-05 and 2005-06 are also expected to be similar. Carbohydrates will make another small step back into vogue, up 3 million bushels. Seed use may come back a bit as some of this year's decrease in wheat acres was due to fields being too wet to plant in time. Feed use will remain about the same, as corn will most likely remain cheap and plentiful.

U.S. wheat exports are projected to be down 13.7% as the 2004-05 wheat world crop was 15% larger than last year, and 7.5% larger than 2002-03. I expect U.S. exports to fall a little more in 2005-06 as the rest of the world will enter the 2005-06 marketing year with significantly more stocks.

This will leave ending stocks for both marketing years almost the same, up 6.8% from 2003-04. My wheat pricing model says a 26.8% ending stocks-to-use ratio means annual wheat prices at about \$3.25. The difference for Michigan wheat producers may be a Michigan soft red price slightly closer to the average U.S. price due to the relative acreage shift, i.e., soft red winter acres being down a lot more than hard red winter acres.

Soybeans

On the one hand, soybean prices “should” be a lot lower; on the other hand, soybean prices may end up a lot higher. Will the Asian soybean rust, hereafter called rust, and aphids attack the soybeans this year? How big of an area? How well will we be able to control them? It appears that if it doesn’t rain when the rust blows over, we can control the beast, but at best our costs will be up. What happens with the final month of Brazil growing season with respect to rust and what happens in the U.S. this summer will affect not only 2005-06 prices, but this year’s 2004-05 prices.

Record planted and harvested acres, and a record yield mean, a record 2004 U.S. soybean crop, up 28% from the aphid plagued 2003 crop. This also means record total supplies (see Table 3). This was the first new record soybean yield since 1994, and we were only up 1.1 bushels, 2.7%, from that record. This was a relatively minor increase compared to almost 13% increase in the record corn yield, and that was year after year.

After having a crop so small last year that we had no choice but to reduce crush dramatically, projected crush at 1660 million bushels has returned with a bang in 2004-05. While still not reaching the record level of 1700 million in 2001-02, it is still a welcome sight given huge supplies in the U.S. and projected for South America. The increase in U.S. crush is a result of both strong domestic feed and oil demand and a resumption of exports, both meal and oil.

Exports for 2004-05 are expected to be up 14%, as shown in Table 3. The biggest reason for the increase is that we have more to export this year. Of course, lower prices and growing world demand have helped. We have enough soybeans to significantly export more than the additional 54 million it would take to set a new U.S. export number; however, we have a “little” competition. South America is expected to have a huge crop, which will be harvested in February and March.

The moisture levels in South America appear to be adequate to finish up their crop, however, there is rust over much of Brazil. At this point, it appears that they are controlling the rust, as long as it doesn’t rain too much when they are trying to spray. If they can continue to control the rust, they will have a record of record crops. Brazil will have about 17% more acres than two years ago. That, along with a normal yield, will yield a huge crop. It is a sign of strong world demand, in addition to low prices, that we can export the projected number given the competition we face. It also helps that we harvest our crop first and have a 5-6 month head start to market it.

Despite the strong use numbers, ending stocks will nearly quadruple. Ending stocks as a percent of use at 15.4% will be the largest since 1990, when we still carried the worlds stocks. The projected world 2005-06 ending stocks-to-use ratio at over 28% will smash any historical comparison since South America became such a big player. My model would indicate an annual average price of about \$4.95 at best. The USDA is forecasting \$5.10, which would include the higher pre-harvest pricing, but if this world crop comes in and we don’t have trouble this summer, I suspect my model may be closer to being correct if not high.

How about next year? My projections for 2005-06, as shown in Table 3, assume we control any outbreaks of rust and aphids. This is a big assumption, but it's where we should start. I expect planted soybean acres to be down 2.1 million acres, but this will not be the same 2.1 million acres I projected corn plantings to be up. I expect a large chunk of soybean acres in the South, where they are more susceptible to rust, will be replaced by cotton and other crops, as well as some corn. In the Corn Belt some of the increased corn acres will come out of soybeans acres, per the returns per acre argument. We may even pick up a few new soybean acres in the Dakotas.

I used a trend yield of 40.5 bu./acre for my 2005 projection shown in Table 3. Less acres and a lower yield would generally mean lower total supplies, but I doubt that will be the case next year. The increase in 2005-06 beginning stocks versus 2004-05 beginning stocks will likely be bigger than the decrease in production.

While I project 2005-06 use will increase due to continued worldwide economic growth, the export competition will be fierce. Crush will likely increase a little with a few more U.S. animal units. However, the increase in ethanol residual will take some of this increase in protein needs. It will be a struggle to increase our oil or meal exports.

If the presented projections are close to accurate, a big if given all that could change, ending stocks will increase as shown. An ending stocks-to-use ratio of 16.2 would indicate \$4.85 annual prices, give or take (more likely take) 30 cents. And, I see no reason for world stocks to drop much without some production shortfall. But, again, there is a whole probability distribution of price possibilities. There is a 20% chance prices could be in the low \$4.00 range, and a 20% chance prices could be in the \$6.00 range.

TABLE 1
SUPPLY/DEMAND BALANCE SHEET FOR CORN

	Estimated 2003-04	Hilker 2004-05	Hilker 2005-06
(Million Acres)			
Acres Planted	78.6	80.9	83.0
Acres Harvested	70.9	73.6	75.8
Bu./Harvested Acre	142.2	160.4	143.0
(Million Bushels)			
Beginning Stocks	1087	958	1985
Production	10089	11807	10839
Imports	<u>14</u>	<u>15</u>	<u>15</u>
Total Supply	11190	12780	12839
Use:			
Feed and Residual	5798	6050	6100
Food, Seed and Ind.	2537	2795	2980
Ethanol for fuel	<u>1168</u>	<u>1425</u>	<u>1600</u>
Total Domestic	8335	8845	9080
Exports	<u>1897</u>	<u>1950</u>	<u>2050</u>
Total Use	10232	10795	11130
Ending Stocks	958	1985	1709
Ending Stocks, % of Use	9.4	18.4	15.4
U.S. Loan Rate	\$1.98	\$1.95	\$1.95
(U.S. Season Average)			
Farm Price, \$/Bu.	\$2.42	\$1.90	\$2.05

Source: USDA and Jim Hilker. (2-01-05)

TABLE 2
SUPPLY/DEMAND BALANCE SHEET FOR WHEAT

	Estimated 2003-04	Hilker 2004-05	Hilker 2005-06
(Million Acres)			
Acres Planted	62.1	59.7	58.1
Acres Harvested	53.1	50.0	48.3
Bu./Harvested Acre	44.2	43.2	43.5
(Million Bushels)			
Beginning Stocks	491	547	583
Production	2345	2158	2110
Imports	<u>68</u>	<u>65</u>	<u>60</u>
Total Supply	2904	2770	2753
Use:			
Food	907	910	913
Seed	80	77	80
Feed and Residual	<u>212</u>	<u>200</u>	<u>200</u>
Total Domestic	1198	1187	1193
Exports	<u>1159</u>	<u>1000</u>	<u>975</u>
Total Use	2357	2187	2168
Ending Stocks	547	583	585
Ending Stocks, % of Use	23.2	26.7	26.9
U.S. Loan Rate	\$2.80	\$2.75	\$2.75
Season Average Farm Price			
U.S. \$/Bu.	\$3.40	\$3.25	\$3.23
Michigan \$/Bu.	3.35	2.90	3.10

Source: USDA and Jim Hilker. (2-01-05)

TABLE 3
SUPPLY/DEMAND BALANCE SHEET FOR SOYBEANS

	Estimated 2003-04	Hilker 2004-05	Hilker 2005-06
(Million Acres)			
Acres Planted	73.4	75.2	73.0
Acres Harvested	72.3	74.0	71.9
Bu./Harvested Acre	33.9	42.5	40.5
(Million Bushels)			
Beginning Stocks	178	112	435
Production	2454	3141	2912
Imports	<u>6</u>	<u>5</u>	<u>6</u>
Total Supply	2638	3258	3353
Use:			
Crushings	1530	1660	1670
Exports	885	1010	1060
Seed, Feed and Residuals	<u>111</u>	<u>153</u>	<u>155</u>
Total Use	2526	2823	2885
Ending Stocks	112	435	468
Ending Stocks, % of Use	4.4	15.4	16.2
U.S. Loan Rate	\$5.00	\$5.00	\$5.00
(U.S. Season Average)			
Farm Price, \$/Bu.	\$7.34	\$4.95	\$4.85

Source: USDA and Jim Hilker. (2-01-05)

2005 ANNUAL OUTLOOK CATTLE AND HOGS

Jim Hilker

Cattle

Would someone like to give a set of assumptions to start from? Like, will the Canadian border open and to what extent? Will Japan reopen its borders for U.S. beef and to what extent? How many more BSE cases will there be and what will be the effect? Oh, that's right, I am the forecaster, I am supposed to answer those questions for you. We will take a middle of the road approach on these assumptions given what we know today, recognizing that any change will change the forecast.

The big news, aside from the above, is we've finally started a new cattle cycle after being in the previous cycle from 1990-04, the longest in at least the last six cycles. The previous five cycles varied in length from 9-12 years versus 14 years. On January 28th, USDA-NASS released the annual cattle number estimates for January 1, 2005. At 95.8 million head, the number of all cattle and calves in the U.S. was above a year ago, as expected. That was a 1% annual increase and the first year-to-year up-tick since 1996. Forecasts are for cyclical increases to continue for several years.

Fueled by excellent cow-calf returns for most producers and nationally improved pasture and range conditions, rebuilding of the U.S. cow herd charged forward in the second half of 2004. Nationally, as of January 1, 2005, the number of beef cows was 0.6% above 2004 and posted the first year-to-year increase since 1996. At nearly 33.1 million head, U.S. beef cows were the largest since 2002. Dairy cow numbers also increased from 2004's numbers, but remained below 2003's. The USDA estimated that heifers over 500 pounds being held for beef and dairy cow replacements were up from a year earlier by 4.1 and 2.8%, respectively.

Compared to a year ago, the number of steers over 500 pounds and calves under 500 pounds were above a year ago (just over 1% for each category). However, the 2004 U.S. calf crop was reportedly below 2003's, and slightly smaller than USDA estimated as of July 1, 2004.

The USDA reported that the number of cattle on feed in all U.S. feedlots was 99.5% of a year ago, as of January 1, 2005. Adjusting that number for cows and bulls in feedlots based on the monthly USDA data for feedlots with 1,000 head or more one-time capacity, puts the calculated supply of steers and heifers not identified as cow replacements outside feedlots at just over 28 million head. That number represented a year-to-year increase of 459,000 head (1.7%), however it was over 800,000 head below 2003. By historical standards, the calculated feeder cattle supply outside feedlots remained small.

All cattle and calves in Michigan at 1,010,000 were down 2% from last year, but all cows that have calved were up 4% at 400,000. Michigan had 93,000 beef cows that have calved, up 9%, and 307,000 milk cows that have calved, up 2% from last year. Beef

cow replacements in Michigan, at 35,000, is up close to 17%. The Michigan calf crop, beef and milk combined, was down 15,000 at 335,000 head. Michigan cattle on feed, January 1, 2005, were down 20,000 at 190,000 head.

The following production and price estimates assume the Canadian border will open in March and around a million head will enter the U.S. Other estimates range from 700,000 to close to two million. This number is critical to the forecast. It also assumes that the U.S. will begin exporting some beef to Japan in the second half of the year. Another assumption is that there will not be a BSE case in an animal born long after the animal feed ban. The last critical assumption is that the strong beef demand in the U.S. will continue.

Beef production in 2005 is expected to be up 3.7%, 2.1% more slaughter animals and 1.5% heavier dressed weights. Choice steer prices are expected to average in the \$84-87/cwt. range live weight. First quarter 2005 beef production is expected to be up 1.8%, entirely from heavier weights. Choice steer prices should average in the \$87-89 range. Feeder steers are expected to average \$99-102 for the 7-800# and \$115-119 for the 5-600# in the first quarter.

In the second quarter of 2005 beef production is expected to be up 4.2%, slaughter up 2.4% and weights up 1.8% relative to the same period in 2004. Choice steer prices are expected to average \$83-87/cwt., just under or near the \$87.23 seen in the second quarter last year. Feeder steers will likely average in the \$93-97 range for 7-800# and \$115-121 for the 5-600#.

The third quarter will bring the lowest choice steer prices, which is normal. Production is expected to increase about 4.5% as slaughter is projected to increase 3% and weights 1.5%. This will push prices down into the \$78-84 range, perhaps a little below last year's \$83.74. The 7-800# feeders are expected to average in the \$95-102 range, and the 5-600# in the \$110-120 range.

Beef production is projected to increase 4.1% in the fourth quarter compared to last year. Choice steer prices should bounce back a little from the third quarter and average \$82-88/cwt. This is about the same as they averaged in the fourth quarter of 2004, at \$86.12. The 7-800# feeder steers are expected to be in the \$93-102 range. Cow-calf folks will have another good year as 5-600# feeders are expected to average in the \$99-113 area.

For planning reasons, let's take a peak at 2006. And let's just do averages for the year. Beef production is expected to grow a little over 2%. Choice steers are expected to average \$85-89/cwt for the year. Feeder prices are expected to stay relatively high, averaging \$98-103 for 7-800# and \$107-117 for 5-600#.

Hogs

Overall, 2004 was a good year for hog farmers. While there were some losses early in the year when prices were in the low \$40's and feed prices were very high, an increase in price by the second quarter and lower feed prices the latter part of 2004 brought good profits. Prices averaged 34% higher in 2004 than 2003, despite 2.8% more production. The keys here were good domestic demand and a 24% increase in exports. The increase in exports meant no increase in per capita consumption despite the large production increase.

Pork production is expected to be up a 1-2% in 2005. Live prices are expected to average \$48-51/cwt. for the year. Per capita consumption will be up marginally, as will exports and stocks. A key to this price forecast is pork demand, both domestic and for exports. How will the increase in beef production affect domestic pork demand, and how would the re-emergence of beef exports to Japan affect Japanese demand for pork? These price forecast assume demand will hold up fairly well.

Pork production is projected to increase about 1.5% in the first quarter. Prices are expected to average \$49-52/cwt. The April-June 2005 period will bring a 1-2% increase in production over 2004. The average price in this second quarter will likely fall in the \$51-54 range.

The third and fourth quarters bring more disagreement among analyst with respect to pork production. I project pork production in the third quarter of 2005 will be up about 1%. Prices should average \$47-51/cwt. Fourth quarter pork production will probably be up a little over 1%. The average live price will be in the \$41-44 area.

If feed prices stay low, as my corn and soybean outlooks would indicate, 2005 should be another profitable year for hog producers. Break-evens will be about \$40/cwt. As you can see, if demand doesn't hold up, we could slip into the red in the fourth quarter.

DAIRY OUTLOOK

Christopher Wolf

2004 was the highest average milk price year on record (without adjusting for inflation) as the Class III price, price of milk used for cheese which is the base from which other prices are derived, averaged \$15.40/cwt. It seems unlikely that milk prices will reach their 2004 heights in 2005, although we cannot rule this out. The most important factors that will contribute to the 2005 milk price relate to the ability of milk production to react to the high milk prices. In order to evaluate the prospects for 2005, we begin with a review of the past year then move to current supply and demand conditions and a price forecast.

2004 Review

A year ago in this space, I wrote that “reasons for optimism abound” with respect to the 2004 milk price. Even so, I do not think anyone looking at the available information in January 2004 foresaw \$20+/cwt. Class III prices coming. Forecasts are made with the best currently available information. One of the tricky aspects of dairy price forecasting is that both the supply and demand are quite inelastic meaning that small changes in quantity result in large changes in price.

Cooperatives Working Together (CWT), BSE and BST all played a role in the 2004 price story. The Cooperatives Working Together (CWT) program took bids in October to purchase herds with the goal being a removal of 49,000 cows with 870 million pounds of annual milk production. Bids were accepted in November 2004 and the program announced that it would purchase 51,757 cows, which produced 931 million pounds of milk last year. The removals will take place through March 2005 and will essentially take all of the national herd growth of the past year. Additionally, the program announced plans to subsidize the export of up to 20 million pounds of cheese and 7 million pounds of butter. The export levels will depend on market prices. The program set the price level at \$1.40/lb. cheese and \$1.30/lb. of butter. Current market prices handily exceed these levels indicating no need for exports. The previous year, the CWT program did not need to export target levels because the milk price recovered. This year, the program should add price resistance at these price levels well above the government support price.

Milk cow numbers in the US reached a low point at 8.987 million in March of 2004 (Figure 1). Since that time they rebounded to a peak of 9.033 million in August and finished the year at 9.011 million. This value would be higher if Canadian replacements could be imported. With Canadian imports curtailed because of BSE, and at least several more months (and potentially a year or more) before the border opens to replacements, US dairy herd growth will continue to come from within.

BST supplies were cut by 50% for some farms in 2004. Some herds had stockpiles which they used in 2004. Certainly milk supplies in 2004 would have been higher with more BST.

Supply Situation

The milk to feed price ratio is an indication of profitability as feed is the single largest expense in producing milk. Any value greater than three encourages more milk production. Figure 1 reveals that the ratio exceeded 3.5, strongly encouraging production, around harvest of 2004. This occurred because feed prices dropped dramatically with the large crops of 2004. Milk prices were high since spring 2004, but feed prices, especially soybeans, tempered the milk to feed price ratio in spring and early summer. We expect that this would also increase heifer prices and, in fact, it did throughout 2004.

BST supplies are set to rebound with Monsanto recently announcing that up to 115% of previous herd supplies would soon be available. High milk and low feed prices make BST attractive for many herds and this increase will contribute to production increases. However, given the current constraints on production, it will take quite a jump to bring milk prices near the previous lows.

Demand and Policy Situation

Commercial disappearance of dairy products, especially cheese, was strong in 2004. Most news on the effects of consuming dairy products was positive (e.g., associated with weight loss). The weaker dollar and higher world prices also contributed to US nonfat dry milk becoming competitive. The US government stockpile of nonfat dry milk is being drawn down.

On the policy front, the Milk Income Loss Contract (MILC) payment program is set to expire as of September 30, 2005. While no payments have been made in several months and none are currently expected any time soon (it takes a Class III price below \$13.69/cwt. to trigger a payment), this program was vital to many farm's cash-flow in 2002 and 2003. Currently, there is a proposal in the US Senate to renew the program for two years.

Another development with relevance to dairy industry demand in 2005 is the beef check-off at the U.S. Supreme Court. Several organizations and producers challenged the beef check-off on free speech grounds. Oral arguments were heard on December 8, 2004 with the decision coming sometime before July. It is possible that the dairy check-off would be affected if the beef check-off were struck down. While this would mean a larger price in the short-run, it would likely hurt long-run consumption.

2005 Forecast

The Class III futures market is often used as a forecast -- as it is a venue where all types of market makers can come with their beliefs and information. As of this writing (January 31, 2005), the Chicago Mercantile Exchange Class III contract averaged \$13.97/cwt. and a range from \$12.80 to \$15.48/cwt. The most recent USDA forecast for 2005 predicted Class III to range from \$12.60 to \$13.40/cwt. and the all milk price from \$14.00 to \$14.80/cwt. USDA is traditionally a fairly conservative forecaster on milk

price. If the national market can maintain Class III prices above \$13.00/cwt., Michigan all milk prices should be in the \$14.00 to \$14.25/cwt. for 2005. The dairy industry will find a way to increase production, and if past experience is a guide, once the production starts increasing it will take a substantial period low prices to bring it back. This period is not currently on the horizon.

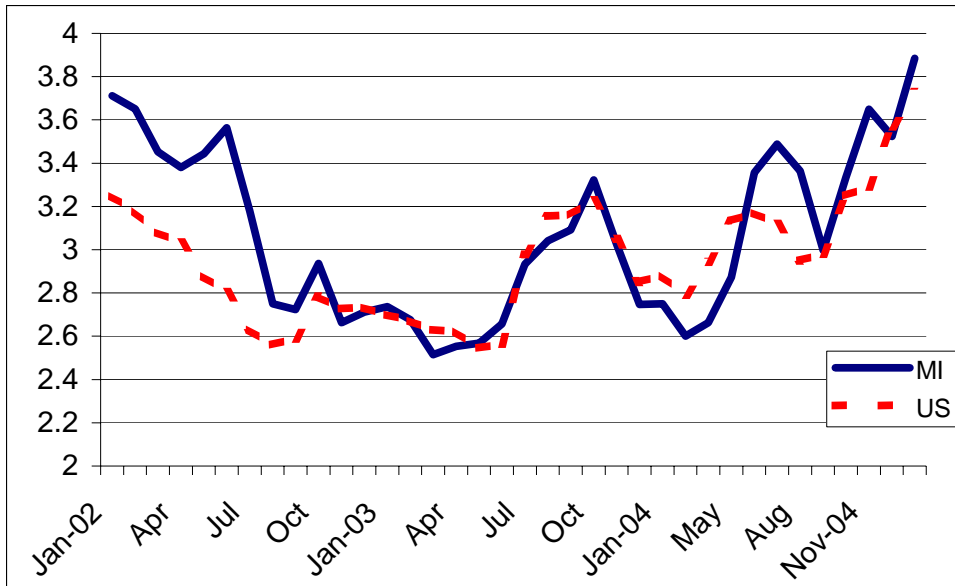


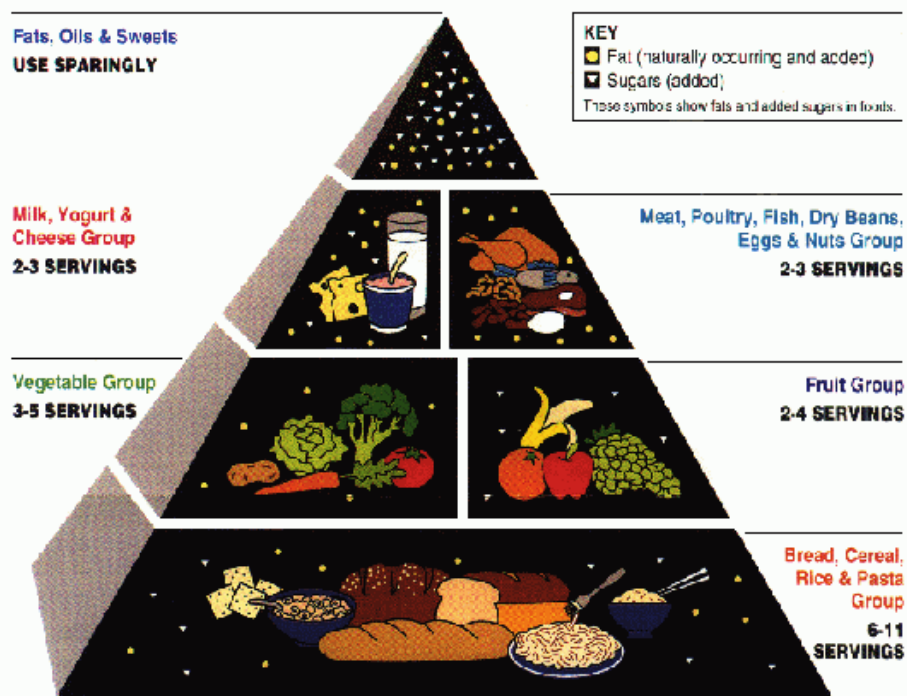
Figure 1. Michigan and US Milk to Feed Price Ratio with MILC Payment, 2002-04

ISSUES AFFECTING FRUIT PRODUCERS

Suzanne Thornsbury

“An apple a day keeps the doctor away.” The old adage about health benefits from fruit consumption is a greater part of American dietary planning than it has been in many years. Today’s consumers have more disposable income to spend, are searching for convenience, and are increasingly conscious of healthy eating as one part of an improved lifestyle.

In January 2005 the USDA released new *Dietary Guidelines for Americans*. These guidelines are revised every 5 years and seek to provide science-based advice on the links between diet, physical exercise and human health. Recommendations are made for public eating patterns with separate recommendations for people who need to lose weight, overweight children, pregnant women, breastfeeding women, and people with chronic diseases. Previously the guidelines were most commonly summarized in USDA’s Food Pyramid.



USDA Food Pyramid, updated in 1996. <http://www.nal.usda.gov/fnic/Fpyr/pyramid.html>

The new 2005 recommendations decrease the emphasis on bread, cereal, rice and paste (down to 3 servings per day with an emphasis on “whole” grains. Fruit and vegetables take on a more prominent spot in the recommendations.

Specifically, under key 2005 recommendations:

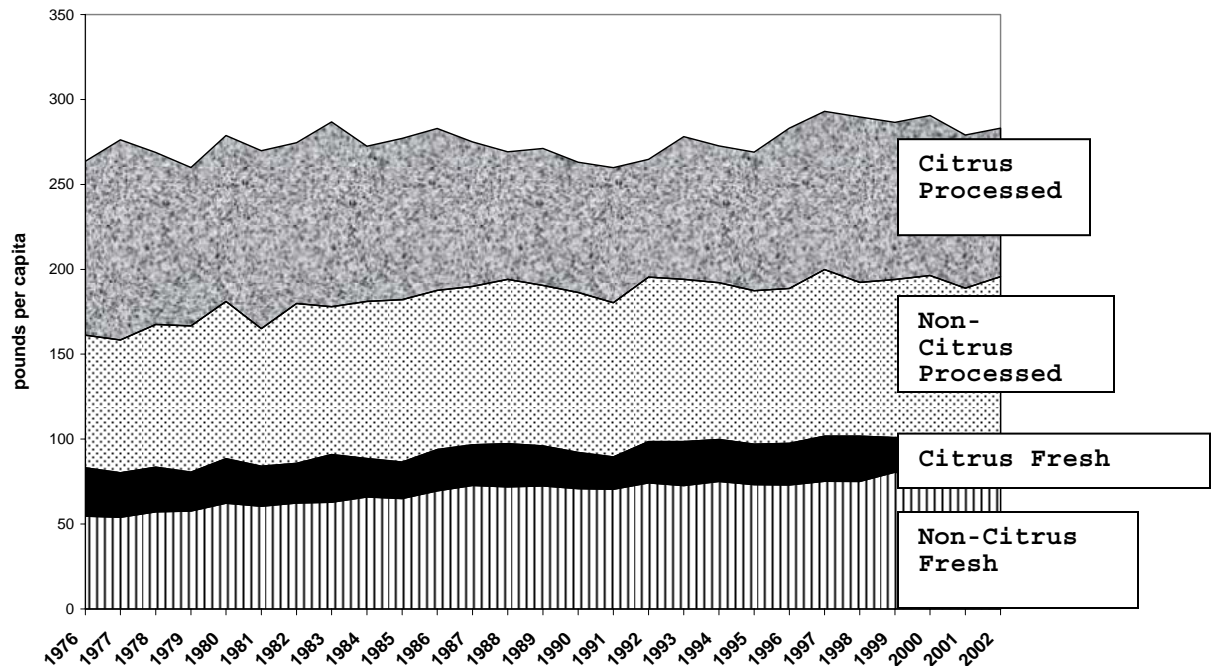
- Consume a sufficient amount of fruits and vegetables while staying within energy needs. Two cups of fruit and 2 1/2 cups of vegetables per day are recommended for a reference 2,000-calorie intake, with higher or lower amounts depending on the calorie level.

- Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week.

<http://www.health.gov/dietaryguidelines/dga2005/document/html/executivesummary.htm>

The new *Dietary Guidelines* complement (and refer to) the *5 A Day Program* founded by the National Cancer Institute in 1991. *5 A Day* recommends eating at least five servings of fruit and vegetables each day for a healthy lifestyle. The program emphasizes that only fruits and vegetables (and not supplements) can provide the natural balance of nutrients desired. Michigan fruits are well represented in the *5 A Day* recommendations which specifically recommend mixing a variety of products organized by color group (<http://www.5aday.gov/color/>). Peaches, apricots, nectarines, pears, cranberries, raspberries, strawberries, watermelon, cherries, apples, blueberries, blackberries, grapes, and plums all appear on the recommended list of fruits.

U.S. per capita fruit consumption has been increasing at a measured pace since 1978. Consumption of non-citrus fresh fruits increased from 55 lbs. per person in 1978 to 76 lbs. per person in 2002. Processed non-citrus fruit consumption increased from 78 to 96 lbs. per person over the same period.



U.S. Per Capita Fruit Consumption, 1978 – 2002

Source: Cook, Roberta. 2004. “Fruit and Vegetables International Trends in Production, Consumption and Distribution”. Department of Agriculture and Economic Resources, University of California, Davis. March, 2004.

There has been a proliferation of fruit items at both food retail stores and restaurants. *Progressive Grocer* estimates that fruit SKUs at the retail level increased from 173 in 1987 to 350 in 2001. Some of the items are new, some are newly packaged or presented, and some are more traditional products. Fruit has been gaining share in the fresh-cut markets, one that was traditionally dominated by bagged salads. Approximately 40% of the fresh-cut fruit sales were through retail outlets in 2003 versus 60% in hotels and restaurants. The fast food chains have made a large push in the fresh-cut fruit area with both Wendy’s and McDonald’s introducing fresh-cut fruit alternatives to their menu and promoting fruit as part of a healthy living strategy. IRI estimates that fresh cut fruit sales will reach \$1 billion in 2008 (Information Technology, Inc.)