

# Iowa Farm Outlook

Department of Economics  
Ames, Iowa

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## March 2011 Hog and Pig Report Summary

March swine inventories came in slightly higher than a year ago, as expected by analysts. Total swine numbers were up 0.6 percent to nearly 64 million head. The sow herd is almost 5.8 million head up half a percent from a year ago. Market hog numbers are up 0.6 percent at 58.2 million head with heavy pigs on feed steady with year ago. Weaned and feeder pig numbers were up 0.7 percent and 50-119 pound pigs were up 1.55 percent from a year ago. The pig crop in the final quarter of 2010 was down almost half a percent, while the first quarter 2011 pig crop was up 1.4 percent. Farrowing intentions in the next two quarters are down 2.6 percent. Litter size was up 1.4 percent from a year ago, as the industry continues to increase pigs-per-sow efficiency. Table 1 contains the summary of the hog and pig report for both national and Iowa numbers.

**Table 1. March 2011 Hog and Pig Report, US and Iowa**

	US		Iowa	
	Mil. Hd.	%	Mil. Hd.	%
All Swine	63.96	0.6%	19.00	1.1%
Breeding	5.79	0.5%	1.03	2.0%
Market	58.18	0.6%	17.97	1.0%
< 50 lbs	18.90	0.7%	4.63	2.0%
50-119	16.23	1.5%	5.66	3.7%
120-179	12.31	0.0%	4.46	0.5%
180+ lbs	10.74	0.0%	3.22	-3.9%
Pig crop				
Sep 10'- Nov 10'	28.15	-0.4%	4.77	1.5%
Dec 10'- Feb 11'	27.99	1.4%	4.75	4.8%
Farrowing intention				
Mar 11'- May 11'	2.85	-2.6%	0.48	2.1%
Jun 11'- Aug 11'	2.87	-2.6%	0.49	2.1%
Litter size				
Dec 10'- Feb 11'	9.61	1.4%	9.80	0.5%

Nationally, producers have cautiously expanded the sow herd from a year ago, however there is a notable drop in farrowing intentions for the second and third quarter. While many factors impact production level decisions, a potentially tight to negative profit margin for hogs being marketed in the in fall of 2011 are draining the incentive to expand the industry's productive capacity. If farrowing intentions are down 2.6 percent in the next two quarters then hog numbers may be down about 1 percent by the fall of 2011. For now market hog supplies are likely to be steady going through the spring but will be up from last year by June.

Iowa's total swine inventory is up more than a percent from last year with sow and market hog numbers up 2 and 1 percent respectively. Pig placements in the state have been up in the past month, so again, the state will be offering more market ready hogs by June. Farrowing intentions in Iowa over the next six months are up more than 2 percent from a year ago. If this is called an expansion for the state's farrowing production, it may

be more of an expansion into existing under used capacity. First quarter Iowa pig crop was up nearly 5 percent from a year ago, an increase very near expectations from even six months ago.

With no dramatic changes or surprises from this report, it is not likely to impact the market. What is impacting the hog market is the uncertainty of how natural disasters and economic instability will impact total pork demand. The futures market made some dramatic price shifts after the tragic earth quake and tsunami in Japan, our largest foreign market for pork. It is still uncertain how the Japanese domestic food supply and demand will be impacted by the natural disaster and damaged nuclear plant crisis. After the disaster, futures prices declined significantly and then had recovered by the next week as the markets determined that demand was not significantly impacted. Another factor impacting prices is the effect increasing food and fuel prices will have on domestic consumer demand and economic recovery. For now, demand has remained solid despite the average retail price of pork being more than 10 percent higher than a year ago. Hog prices are up 15 percent from year ago. Pork exports grew 3 percent last year, after export growth in recent years has been closer to 8 percent. Exports are expected to grow at a similar pace to last year.

Pork supplies are expected to be steady to slightly higher from last year. Table 2 contains the expected change in pork supply and price forecasts for the next four quarters. Hog numbers will be steady in the next quarter but lean hog dressed weights are up more than 2 percent. Increased weights will offset part or most of increased exports, leaving a similar supply of pork for the domestic market as seen last year. In the third quarter hog supplies will begin to increase, and fourth quarter hog supplies will be down from last year's "new-corn-surprise" wave of fast growing heavy weight hogs.

**Table 2. Production and ISU and Futures Price Forecasts**

	% Chg in Pork Supply	ISU Lean Hog forecast \$/cwt, IA-So. Minn.	Futures Lean Hog on 3-25-11, w/ Iowa basis
2 <sup>nd</sup> quarter 2011	unchg	92-95	97.33
3 <sup>rd</sup> quarter 2011	+0.8%	91-94	96.04
4 <sup>th</sup> quarter 2011	-2.3%	83-86	83.39
1 <sup>st</sup> quarter 2012	-2.0%	83-86	86.26

Futures prices for lean hogs broke the \$100/cwt, which is good news as corn and feed prices remain high. Part of the higher prices is inflationary price action, but even with this taken into account in the ISU forecasting model, the futures market price adjusted for an Iowa basis is still offering a slightly higher price.

*Shane Ellis*

## **Stocks and Acreage: The Outlook Remains Tight**

March is going out like a lion in the crop markets. The latest news to hit the markets was the USDA Grain Stocks and Prospective Plantings reports. These reports provide an updated view on demand for the current crop and supply for the upcoming crop. In this case, the view is that demand for the current crop is stronger than anticipated and the potential supply from this year's planting might be just enough to meet demand, but it will not be big enough to build back stocks to more comfortable levels. The initial market reaction has corn and soybean prices significantly higher.

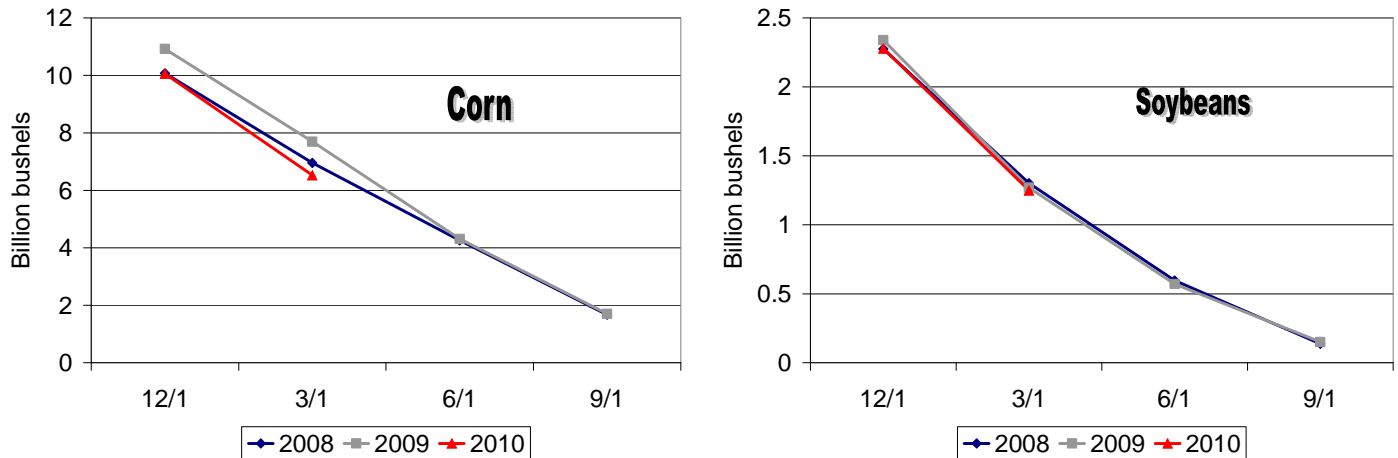
### **Grain Stocks**

Corn stocks on March 1, 2011 are computed at 6.52 billion bushels. This is down 15 percent from last year and below trade expectations. The trade was expecting around 6.7 billion bushels. While off-farm corn stocks are roughly steady with last year, on-farm corn stocks are down 25%. This shows that a lot of corn has moved at least one step up the marketing chain and corn farmers have less crop left to sell than they did last year at this time. Corn disappearance from Dec. 1, 2010 implies 3.53 billion bushels were used during the quarter, that's up

10 percent from last year. The state-level numbers show corn stocks down across the board, with one exception, Wisconsin.

Soybean stocks on March 1, 2011 are estimated at 1.25 billion bushels, down 2 percent from last year and below trade expectations. On-farm storage is down 17 percent from last year, but off-farm storage is up 13 percent. Quarterly soybean usage is estimated at 1.03 billion bushels, down 4 percent from last year. As Figure 1 shows, soybean stock levels are tracing out the same pattern we've had the last two crop years. Iowa's soybean stocks are down from a year ago, with the on-farm stock drop overwhelming the off-farm increase. In general, soybean stocks are higher in the northern and eastern states (North Dakota, Minnesota, Wisconsin, Illinois, Indiana, and Ohio) and are lower as you move to the south and west.

**Figure 1. Corn and Soybean Stock Levels for the 2008-2010 Crop Years**



Wheat stocks continue to move upward, up 5 percent from a year ago. But wheat usage for the quarter is also up 20 percent, at 508 million bushels. So as with last year, usage was up, but not enough to offset supplies. As with corn and soybeans, off-farm stocks are up and on-farm stocks are down.

Overall, the stocks picture shows strong demand across the crop sector with corn and wheat disappearance leading the charge. Market analysts have been looking for signs of demand rationing, given the higher prices we have experienced this winter. The stocks report did not provide any signs of that.

### Prospective Planting

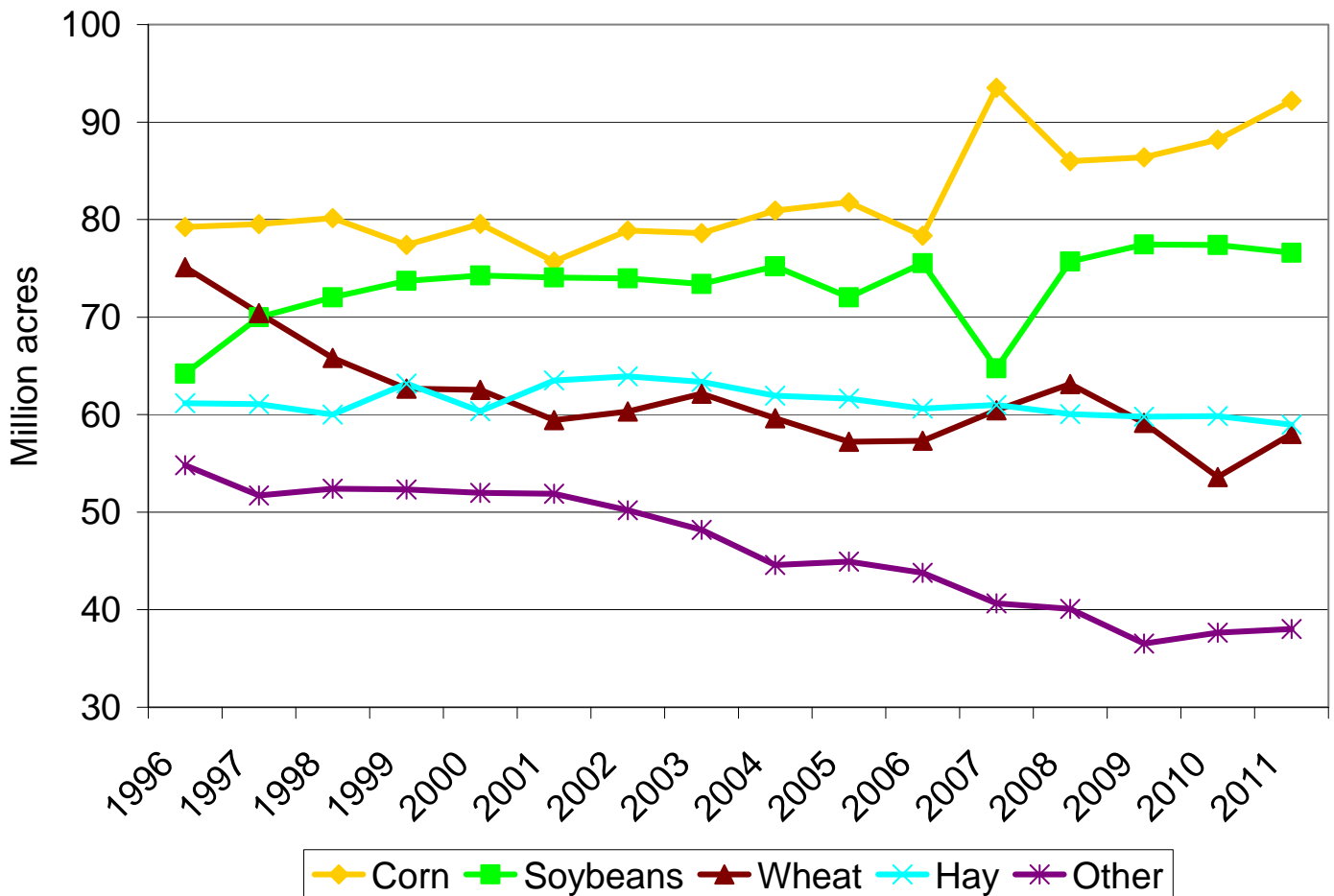
As like last year, the Prospective Plantings report came in around expectations. Pre-report trade expectations had put soybean planted area at roughly 77 million acres. The USDA report showed 76.6 million. So soybean area is projected to be one percent less than last year. Pre-report estimates for corn area averaged 91.7 million acres. The USDA report showed 92.2 million. That would put corn area up 5 percent, roughly 4 million acres, from last year. Wheat planting intentions are up 8 percent. Cotton intentions are up 15 percent. So in the battle for acreage among the big 4 crops, soybeans gave up some ground to the other 3.

By state, soybean area is projected to increase in 12 states, hold steady in 3 states, and decline in 16 states. North Dakota and New York are projected at record high soybean area. Missouri, South Dakota, Kentucky, and Arkansas are also intending to plant significantly more soybeans. Three of the major soybean producing states, Illinois, Indiana, and Minnesota, are holding soybean area steady. Iowa heads up the soybean decline list, shifting 400,000 acres out of soybeans. Kansas, Ohio, Nebraska, and Mississippi all intend to plant at least 100,000 less acres to soybeans. Given the national total of 76.6 million acres, the 20-year average harvest ratio of 98.3 percent, and an USDA yield estimate from the February Ag. Outlook Forum of 43.4 bushels per acre, this would lead to a projected 2011 soybean crop of 3.268 billion bushels. That would be the 3<sup>rd</sup> largest soybean crop on record, just behind the 2009 and 2010 crops.

For corn, 33 states are projected to increase plantings, 5 are expected to hold acreage steady, and 4 are projected to decrease corn area. Leading the charge to corn, South Dakota plans to increase corn area by 850,000 acres. Increases of at least 100,000 acres are projected in North Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Mississippi, Michigan, Ohio, and Tennessee. The largest drop in corn area is in Texas, where cotton gained the lion's share. Given the national total of 92.2 million acres, the 20-year average harvest ratio of 90.8 percent, and an USDA yield projection of 161.7 bushels per acre, this would lead to a projected 2011 corn crop of 13.538 billion bushels. That would be the largest corn crop on record.

Overall, principal crop area is projected to increase to 323.8 million acres, up 7.1 million, but down 1.2 million acres from our recent peak in 2008. The two states with the largest increases are North and South Dakota, with over 1.8 million additional acres. With flooding still a major concern in the Dakotas, that brings some of this acreage surge into question. There is a strong surge of acreage coming from Kansas, Missouri, and Illinois. Most of that surge was captured by winter wheat, but corn is pulling at least 150,000 acres more in each of these 3 states. Principal crop area in Iowa increased 30,000 acres. The acreage numbers from the Prospective Plantings will serve as the official USDA numbers until the June acreage report.

**Figure 2. Crop Acreage Shifts Since 1996**



**Market Reaction**

The market reaction to these reports was swift and strong. Corn futures for the 2010 and 2011 crops were limit up, so we will likely see some additional upside movement. The corn futures for the 2012 and 2013 crops went up 26 cents per bushel. Soybean futures were roughly 30 cents higher for all of the contracts between May 2011 and November 2014. Wheat futures at Chicago soared 35 to 40 cents per bushel. Cotton futures prices were up 5 to 7 cents a pound for all contracts in the next year and a half. So while acreage is up for many crops, the expected production is not seen as enough to quench demand and build up stocks. Prices are moving higher to ratchet down demand. As the stocks report indicated, that hasn't happened yet. And with rumors of Chinese

corn purchases and the continuing strength of energy prices, demand may be hard to budge. At the Ag Outlook conference in February, USDA put out unofficial season-average price estimates for 2011, \$5.60 for corn and \$13.00 for soybeans. Following the March reports, futures prices are pointing to 2011 season-average prices around \$6.10 for corn and \$13.45 for soybeans. Now the markets are waiting to see if Mother Nature cooperates, first during the planting window and then during the growing season. Weather impacts would send the crop markets beyond these projected record high price levels.

*Chad Hart*

## February Milk Production Up 2.4%,

February 2011 23 major dairy states milk production increased 2.8%. Production per cow was up by 24 pounds from one year ago. Milk cow numbers were 81,000 more than Feb 10 but the same as the previous month. Jan 11 milk production was revised down 21 million pounds or 0.1%.

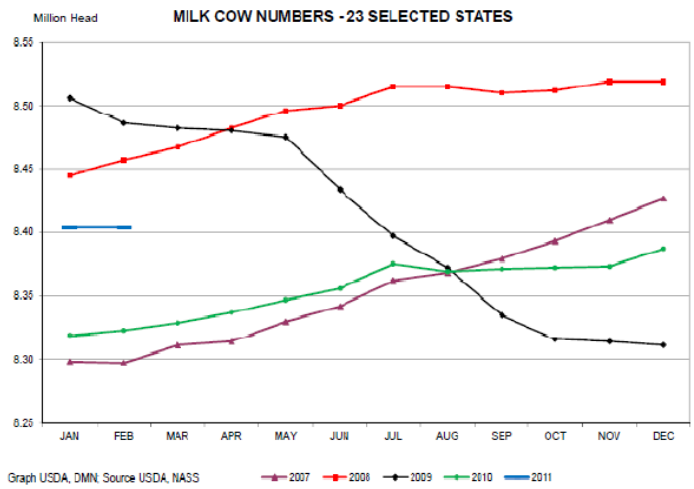
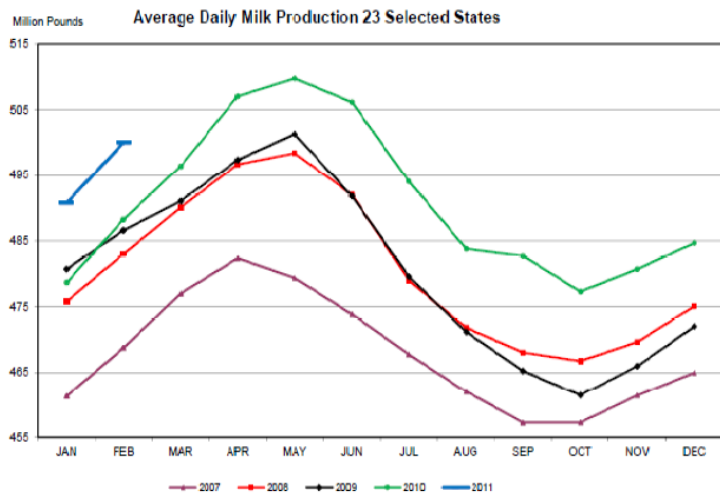
Iowa Dec 10 milk production was up 1.05% compared to one year ago. Cow numbers were 5000 less compared to one year ago and milk production per cow was 55 pounds higher than one year ago. Cheese production in Iowa during Jan 11 was 20,939,000 pounds, up -1.7% from Dec 10 and 4.3% higher than one year ago.

NE Q4 2010 milk production was -4% from the same quarter in 2009. The decline was due to a drop of 3000 cows. Q4 2010 milk per cow was only 16 pounds per month higher than the same time one year ago.

### Milk Production: Selected Dairy States, February 2010

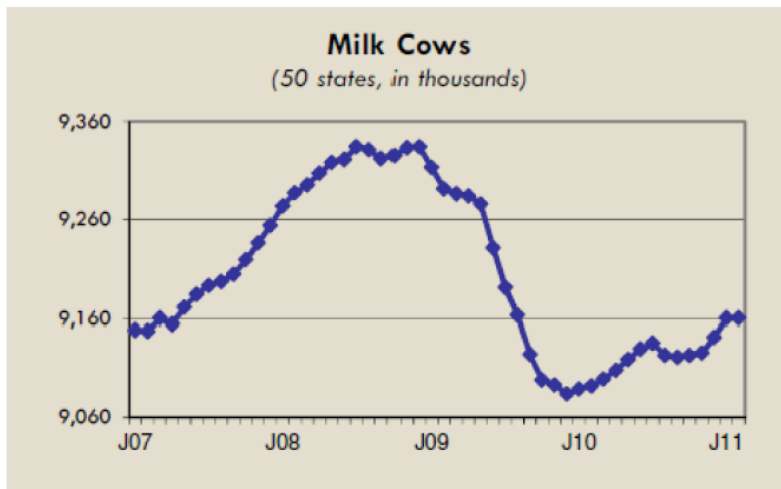
State	thousands			pounds			million pounds		
	2010 cow numbers	2011 cow numbers	% change cow numbers	2010 milk per cow	2011 milk per cow	% change milk/cow	2010 total milk production	2011 total milk production	% change total milk
Iowa	213	208	-2.35%	1575	1630	3.49%	335	339	1.05%
MN	470	471	0.21%	1510	1495	-0.99%	710	704	-0.80%
WI	1260	1266	0.48%	1585	1585	0.00%	1997	2007	0.48%
IL	101	98	-2.97%	1530	1530	0.00%	155	150	-2.97%
CA	1760	1752	-0.45%	1755	1805	2.85%	3089	3162	2.38%
CO	116	123	6.03%	1800	1795	-0.28%	209	221	5.74%
KS	116	123	6.03%	1620	1630	0.62%	188	200	6.69%
ID	554	573	3.43%	1690	1690	0.00%	936	968	3.43%
AZ	170	185	8.82%	1940	1915	-1.29%	330	354	7.42%
NM	318	324	1.89%	1870	1890	1.07%	595	612	2.98%
PA	541	543	0.37%	1520	1510	-0.66%	822	820	-0.29%
NY	610	610	0.00%	1560	1620	3.85%	952	988	3.85%
TX	410	425	3.66%	1640	1720	4.88%	672	731	8.72%
23-State	8323	8404	0.97%	1642	1666	1.46%	13666	14001	2.45%
US 4th quarter	9090	9126	0.40%				46265	47543	2.76%

Only five of the 23 dairy states had less milk than one year ago. MO had the second largest decline in milk production, -2.7%. The largest milk drop was IL at -3.2%. MN, PA and UT were the other states that lost milk production, but all were below 1%. FL saw a rise of 12.2% in milk production; milk cow numbers and milk per cow both rose significantly.



Source: Dairy Market News

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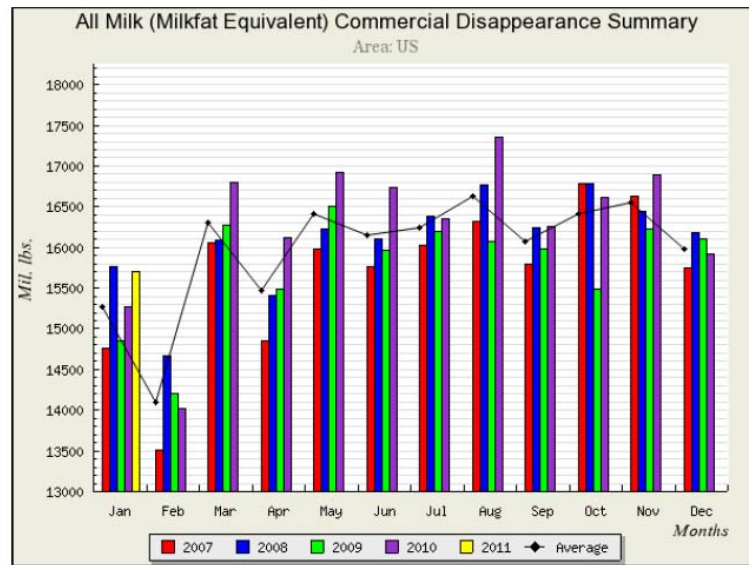


Source: Daily Dairy Report

### Demand or Disappearance

Fluid milk demand is still lower than one year ago. 2010 fluid milk is -1.4% and for the last quarter of 2010 was -1.3%. Total fluid milk sales for Jan 11 Organic fluid milk demand rose by 11.7%. Without this strong organic milk demand, conventional milk consumption would have declined by 2.1%. YTD commercial disappearance of all dairy products is up 2.8%. All categories of dairy products rose except fluid milk.

Dairy Product Manufacture: October 2010

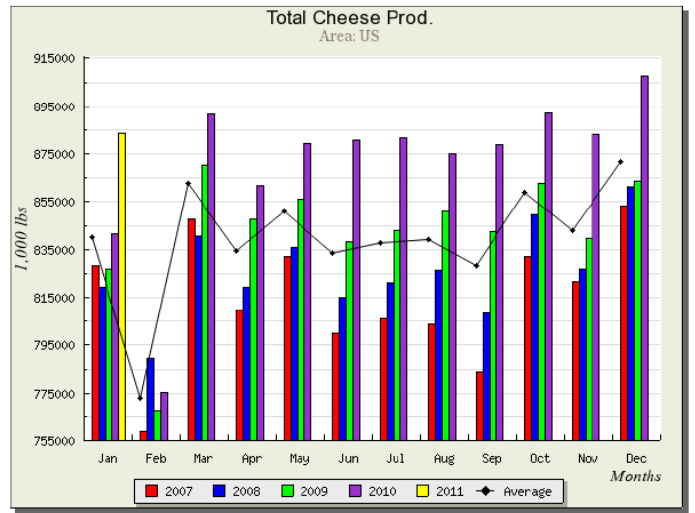
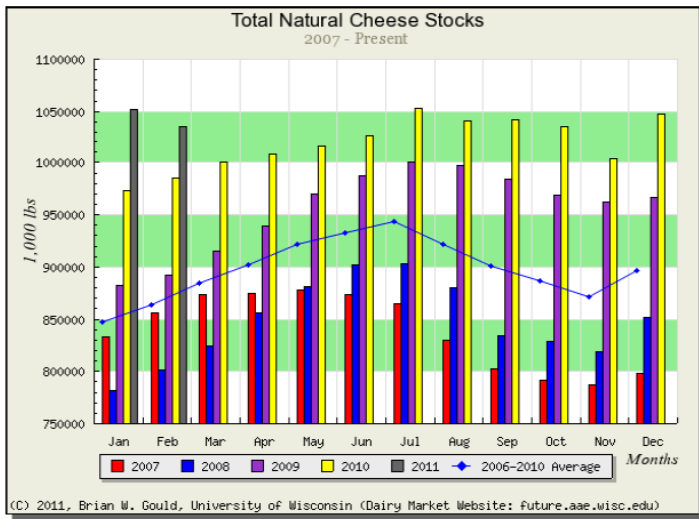


Product	thousands pounds	Jan 10 % change	Dec 10 % change	YTD % change
Butter	166,518	2.70	6.8	0
Cheese, total	883,409	5.00	-2.7	0
Cheddar	281,470	5.60	-0.1	0
Other American	81,265	0.30	-9	0
Swiss	27,014	-0.60	-8	0
Italian Style	382,112	5.30	-2.2	0
NDM	116,751	-9.20	-17.4	0
Sour Cream	96,407	7.60	-13.9	0
Yogurt	359,232	5.90	5.1	0
Dry Whey, total	91,206	6.10	2.1	0
Lactose	81,692	22.20	1.7	0
WPC	35,119	1.20	-2.9	0
Frozen	1000 gal			
Ice cream, regular	31,169	-4.30	6	0
Ice cream, lowfat	13,085	1.50	3.9	0

Source: Understanding Dairy Markets, U of WI

Source: Dairy Products

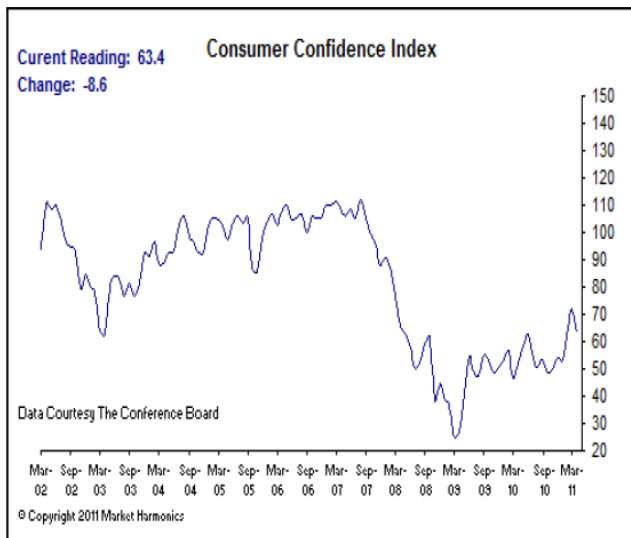




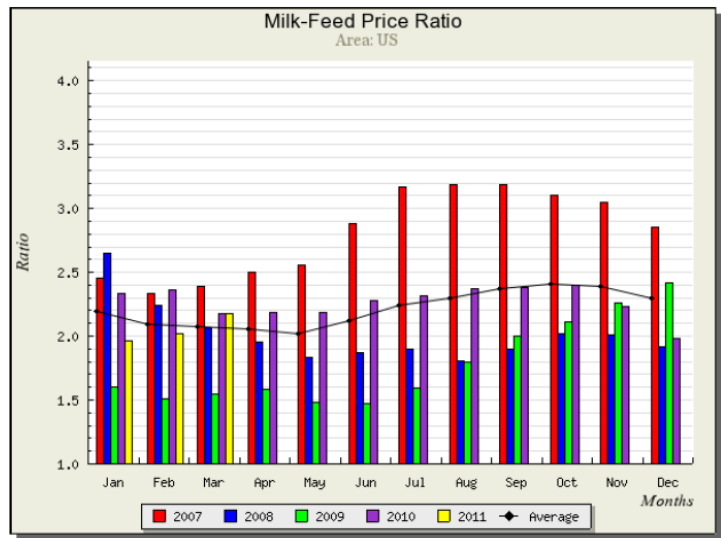
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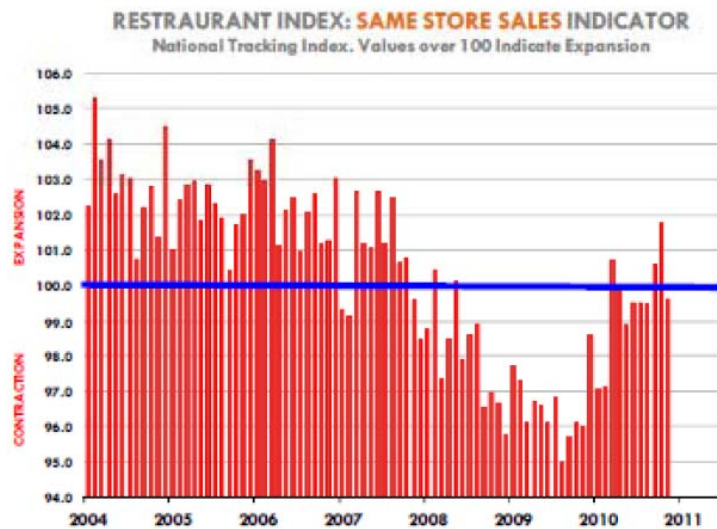
### Analysis



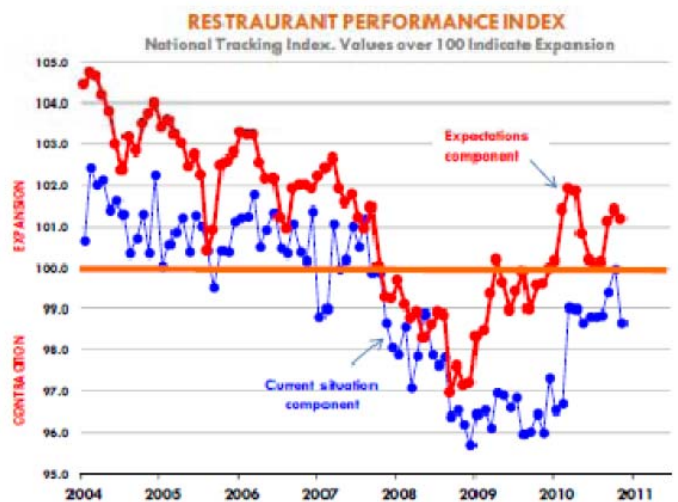
Source: Market-Harmonics.com



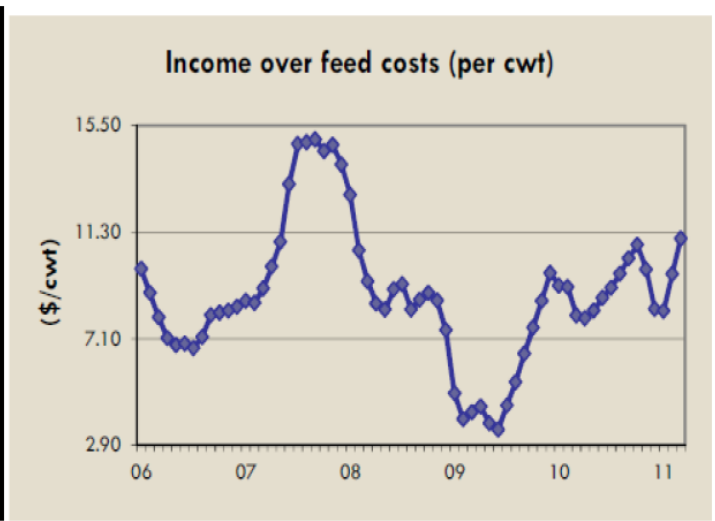
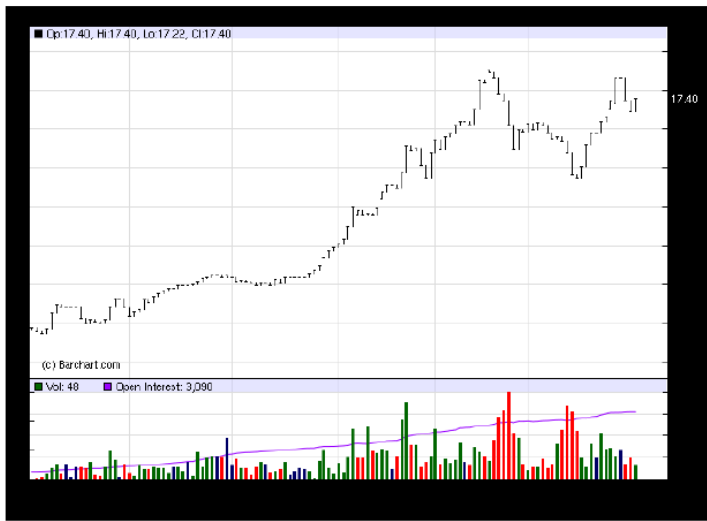
Source: Understanding Dairy Markets, U of WI



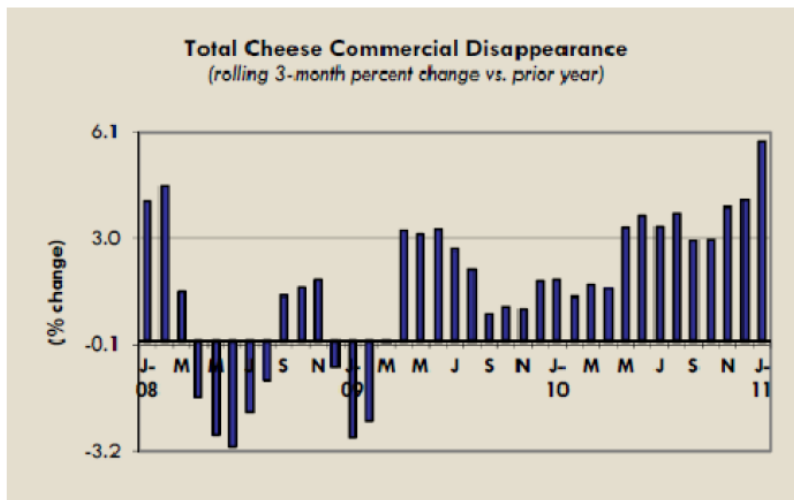
Source: Daily Livestock Report



Source: Daily Livestock Report



Source: Barchart.com July 2011 Class III Milk Futures    Source: Daily Dairy Report



Source: Daily Dairy Report

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