



Fall 2009

Agricultural Situation and Outlook Fall 2009

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FOREWORD

This publication is prepared by the faculty and staff of the Department of Agricultural Economics, University of Kentucky. These articles present information on the economic situation and outlook for Kentucky agriculture and are intended to assist farmers, agribusiness professionals, Extension field staff, and others with interest in agriculture and agribusiness. Information presented here is based on the most recent information and research available. However, the rapidly changing economic and policy conditions for agriculture limit the usefulness and life span of conclusions and recommendations cited here. Decision makers should keep these facts in mind. Feel free to use the information included in this publication for other uses, but please provide professional citation about the source. The papers contained in this publication are published without formal review. The views expressed are those of the author and do not necessarily reflect the views of the University of Kentucky, the Agricultural Experiment Station, or the Cooperative Extension Service. To obtain additional information, or to provide comments or suggestions, contact the author or the editor.

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Some of the AEC Extension family members: (from left) Lee Meyer, Greg Halich, Craig Infanger, Jerry Pierce, Kenny Burdine, Laura Powers, Jennifer Hunter, Dick Trimble, Tim Woods, Sara Williamson

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2009- 2010 AGRICULTURAL SITUATION & OUTLOOK

Editors

Kenny Burdine & Sara Williamson

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The 2010 Economic & Agricultural Outlook

Fall 2009

Craig L. Infanger

U.S. Economic Outlook

One year ago, the U.S. economy was on the verge of financial meltdown, world markets became chaotic, international credit flows were reduced, and the worst economic recession since WWII spread across 49 of the 50 states. The combination of \$10 trillion in bailout, credit programs, and economic stimulus programs has stabilized both the financial system and housing prices. Now there is an emerging consensus that the recession may have technically ended. However, the price of intervention has been steep with Federal budget deficit ballooning to an all-time high of \$1.4 trillion.

Government and private forecasts indicate the economy will be back into modest positive growth in 2010. However, the length of the recovery may be several quarters, leaving “recession like” conditions in many states. With positive growth, we can expect the Federal Reserve to gradually increase interest rates in 2010. The rising unemployment rate – now nearly 10% nationally and 11% in KY – will be the most prevalent economic policy challenge in 2010. Until the economy starts generating more than 125,000 jobs per month, we may be facing another ‘jobless recovery’, similar to the last recession in 2001. Inflation has plunged, as consumer spending dropped and energy prices receded from record highs in 2009, but it still remains a long-term risk. The massive high government borrowing needed to finance spending programs is resulting in national debt rising from \$5 trillion in 2008 to an expected \$14 trillion in 2018, requiring nearly \$1 trillion in annual interest payments.

Economic Outlook for Agriculture

As the full effects of the global recession hit, agriculture has experienced a quick economic down-turn. After two years of record-high income, the value of cash receipts for both crops (\$165 billion) and livestock (\$119 billion) are down this year due to lower prices and exports. Total cash receipts from crop and livestock marketing will drop to \$284 billion – down \$40 billion – but still above the 10-year average of \$232 billion. The sobering reality is reduced net farm income, down by 38%, to about \$54 billion. USDA commodity program payments climbed to \$13.5 billion this year. The boom in U.S. agricultural exports has ended with exports dropping sharply from \$115 billion in 2008 to about \$98 billion this year, mostly due to lower grain volumes and prices. After a short dip in 2009, food imports are forecast to be another record-high next year as economic recovery continues. Despite increases in farm debt, the U.S. agricultural balance sheet is exceptionally strong with farm sector equity projected to rise again to \$2.1 trillion.

Kentucky’s agricultural economy and net farm income generally mirror trends in the U.S. agricultural economy, and this year is no exception. With equine cash receipts down sharply, combined with lower grain, milk, and hog prices, total cash receipts this year will decline significantly – down over \$800 million. With production expenses about the same as last year, Kentucky’s net farm income is forecast just under \$1.0 billion, down one-third from last year and well-below the 10-year average of \$1.3 billion. As the economy improves in 2010, Kentucky agriculture will strengthen as cash receipts and net income recover from the low-point in 2009.

ECONOMIC FORECASTS

GDP growth

Recovery to +1.5% to +3%

Interest rates

Trending up – Prime to 3.75% - 4% by summer 2010

Inflation

Low in near term; longer term risk of much higher inflation

Energy Prices

Crude in \$70 -\$80 range; natural gas price remains low

Unemployment

Unemployment rate slowly drops to 6-7%, job recovery

Housing

As prices stabilize, construction slowly recovers

Trade deficit

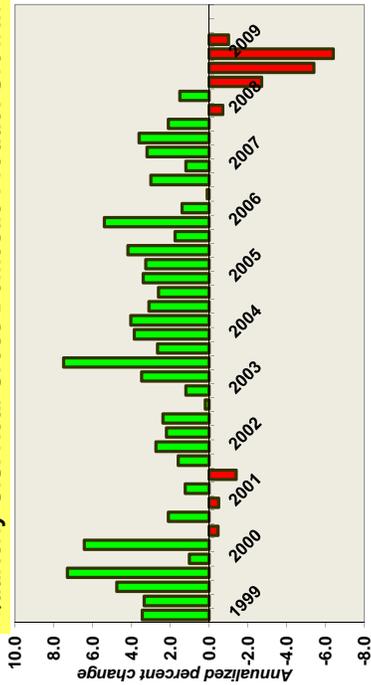
Recent improvement stops

Budget deficit

Down from \$1.3T record to \$700B in FY 2010

Worst recession since WWII

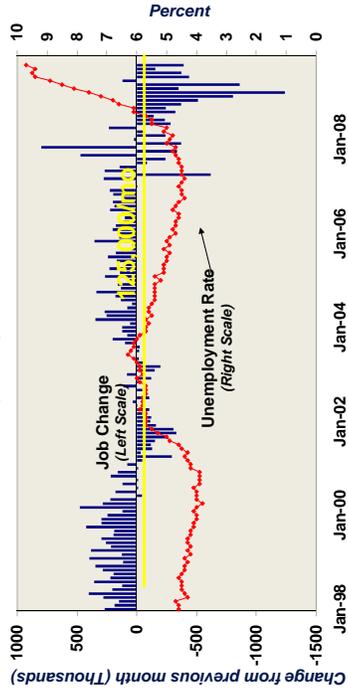
Quarterly U.S. Real Gross Domestic Product Growth



Source: Bureau of Economic Analysis

UK Agricultural Economics

Change in Payroll Employment & Unemployment Rate

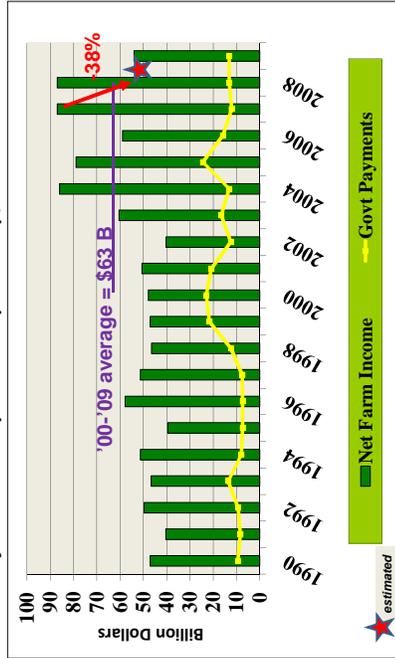


Source: Bureau of Labor Statistics

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U.S. Net Farm Income

Major decline as prices & exports drop, but costs rise

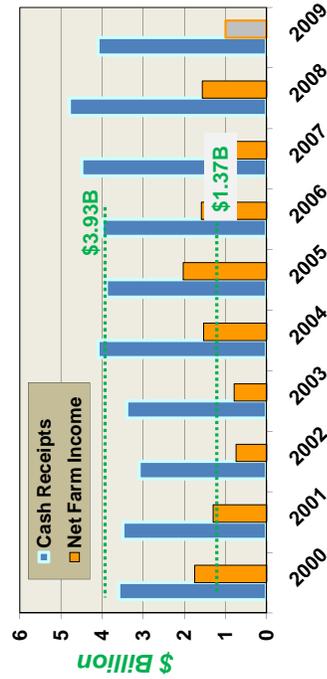


Source: ERS/USDA

UK Agricultural Economics

KY Cash Receipts & Net Income

Record high in 2008; dropping in 2009



UK Agricultural Economics

Kentucky's Land Value Situation & Outlook 2009-10

Richard L. Trimble

Real estate values for US farms peaked during 2007, then started to decline in 2008. According to information recently released by the USDA, the value of farmland and buildings on farms across the US averaged \$2,100 per acre on January 1, 2009. This \$2,100 value is 3.2 percent (\$70/Ac.) less than the recent record high of \$2,170 set in 2008 (USDA, NASS has changed land values in the past five years to reflect Census data.). More specifically, crop land values decreased by \$110 per acre (4%) to \$2,650, and pasture land values declined by \$20 per acre (1.8%) to \$1070.

Kentucky Land Values

Despite bleak national averages, Kentucky's farm real estate values were unchanged during 2008. As indicated in Figure 1, Kentucky's average value of agricultural land was \$2,850 per acre as of January 1, 2009, and the same in 2008. All surrounding states experienced decreases in land values. Both Missouri and Tennessee experienced the greatest decreases of 4.3%, while Illinois had the smallest decline of 0.4%.

A survey of Kentucky County Extension Agents was conducted in October 2008 to supplement the USDA information. Figure 2 reports the results of this survey concerning Kentucky land values. According to the survey, participating agents estimated Kentucky farm real estate values to be higher than indicated by the USDA. The average value of Kentucky farm land, according to the agent survey, was \$4,155 per acre, which is \$10 per acre (0.2%) less than in 2007. Regionally, the values were: East Region - \$4,316, Central Region - \$4,547, and West Region - \$3,528.

Kentucky Land Rental Rates

According to USDA's estimates, Kentucky's crop land cash rental rate was estimated to be \$88.00 per acre in 2009, an increase of \$9.50 per acre from 2008. The only state with a greater increase in cash rent was Missouri with a \$10.00 increase. Other states experienced no change or smaller increases such as Illinois at \$7.00 and Indiana with a \$6.00 increase.

The survey of County Agents also collected information on cash rental rates for both crop and pasture land. Figure 3 indicates the survey found Kentucky's average rental rate to be \$96.50 per acre for crop land, which was just a bit higher than that reported by the USDA. The rental rate for pasture land from the survey was \$35.02 per acre. The USDA does not report rental rates for pasture land in Kentucky.

As farm real estate values have increased over time, cash rent as a percent of value has declined. As Figure 4 indicates, the survey found crop land cash rent as a percent of value was 3.0% while it was 1.7% for pasture land.

Future Directions for Farm Real Estate Values

Falling commodity prices, combined with dramatic increases in cost of production, have resulted in falling profit margins. Combining this with a recession in the general economy and reduced demand for recreational land has cooled off the Agricultural land market. If these conditions continue or become more pronounced, Kentucky's land values can be expected to reflect the lower national levels. Such a result would be consistent with expectations expressed by agents in our October 2008 survey.

Historical Land Values US & KY, Dollars Per Acre, 1979-2009

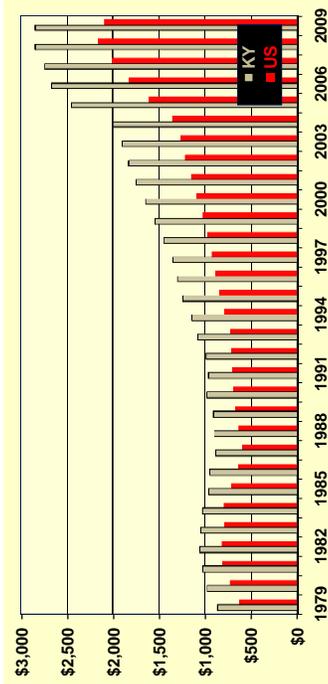
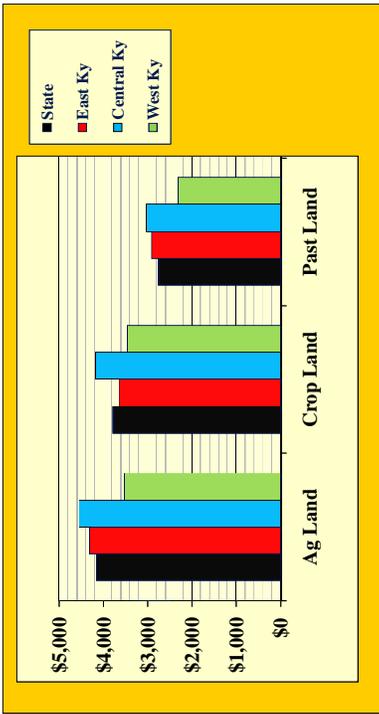


Figure 1.

Figure 2.

Average Price per Acre of Kentucky Agricultural Land October, 2008



Source: Survey of Participants in ESM Meetings, October, 2008

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Cash Rental Rate per Acre Typical Kentucky Crop & Pasture Land October, 2008

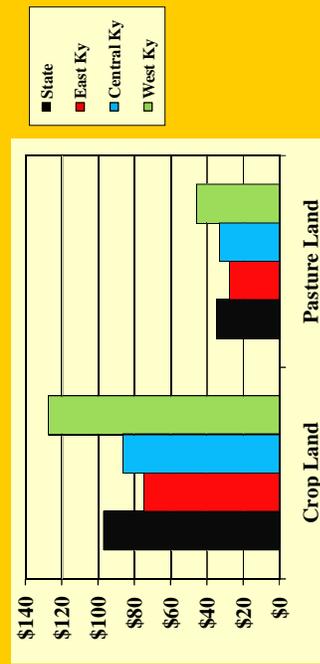


Figure 3.

Source: Survey of Participants in ESM Meetings, October, 2008

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Land Cash Rent as % of Value Typical Kentucky Crop & Pasture October, 2008

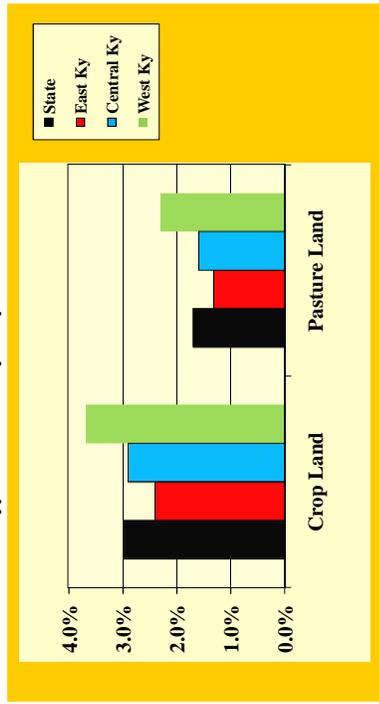


Figure 4.

Source: Survey of Participants in ESM Meetings, October, 2008

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Burley & Dark Tobacco **Situation & Outlook 2009-10** *Will Snell*

Burley: Despite some adverse demand conditions, U.S. burley acreage is forecast to be slightly higher in 2009 compared to 2008, with most of the increase attributable to the 3,000 additional acres planted in Kentucky. This higher acreage level occurred despite a reduction in contract volume by most U.S. purchasers. According to the September 09 USDA crop report, anticipation of higher yields and more acreage is resulting in a U.S. burley crop expected to total 213.4 million pounds. If this prediction is accurate, 2009 production will be 6% higher than the 2008 crop. However, while early housed burley experienced favorable curing conditions, excessive rainfall during the week of September 21st has put in question both the quantity and quality of the late crop.

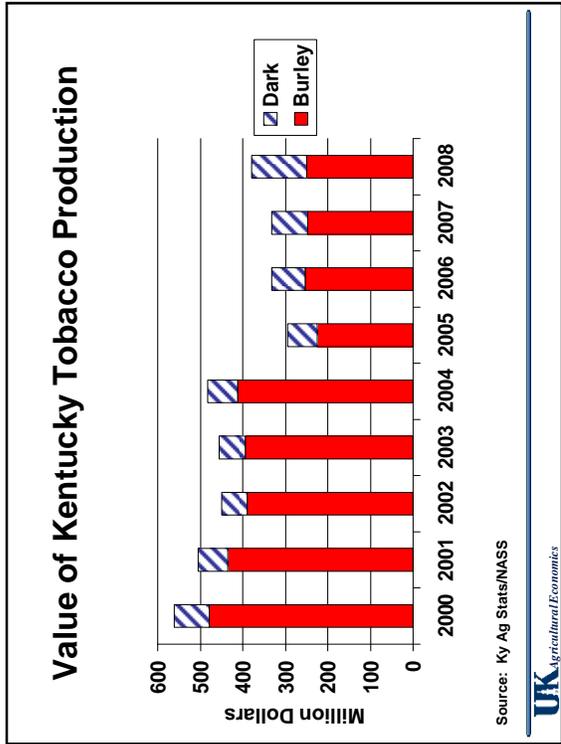
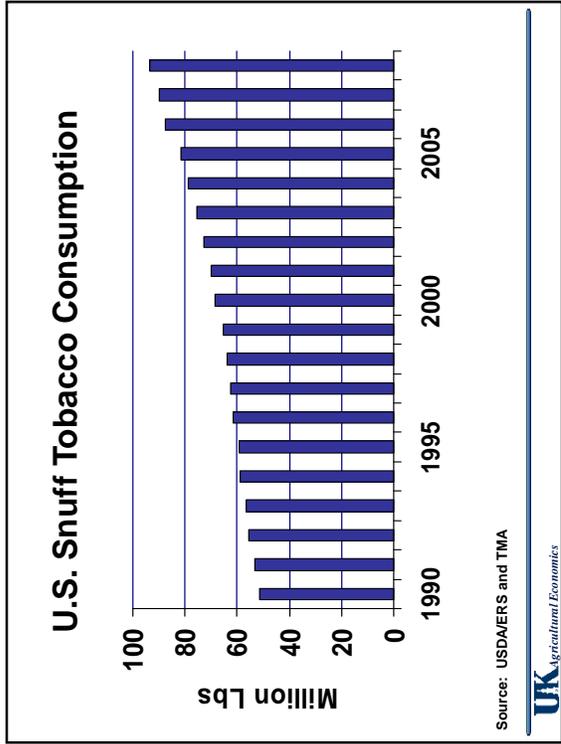
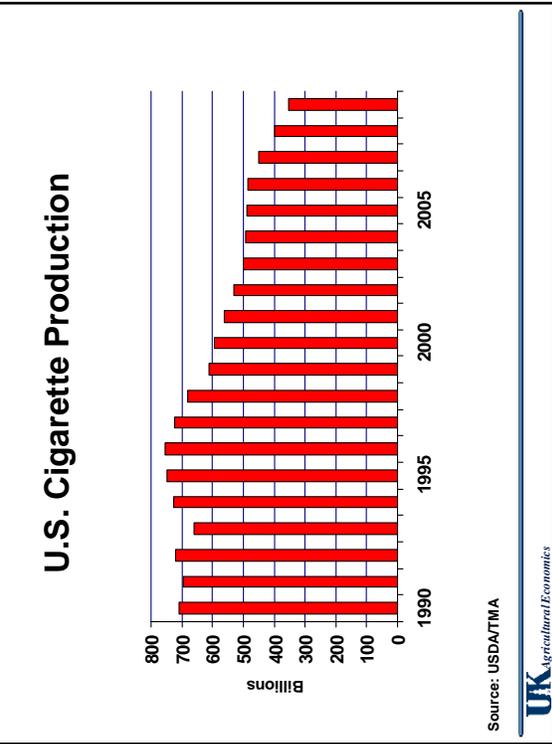
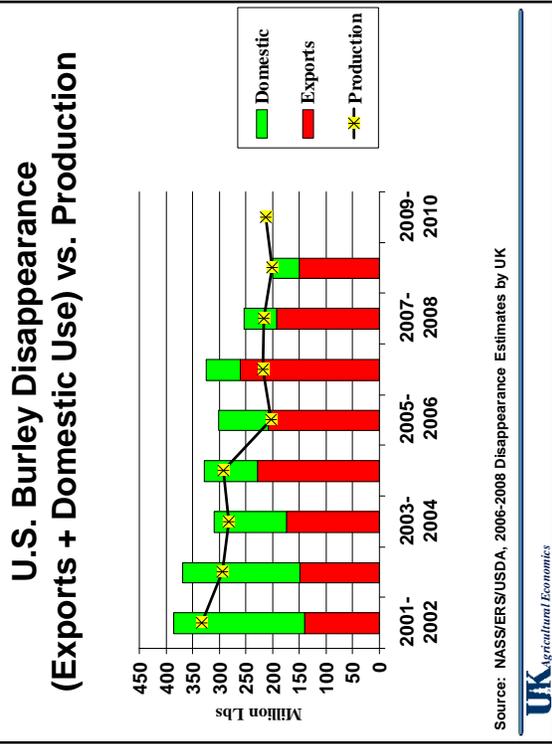
USDA no longer tracks world tobacco production. Relying on the August 2009 Universal Leaf Tobacco Company Production Report, world burley production is estimated to be 15% higher in 2009, following a 19% increase in 2008. According to the report, burley production in North and South American markets has been relatively flat in recent years, while burley production in Africa more than doubled since 2007. Although the lower quality African styles of “filler” leaf do not directly compete with the higher quality “flavored” burley (produced in the U.S., Brazil, and Argentina) they nevertheless enter the supply chain and are likely a partial substitute for U.S. burley in blends worldwide.

On the demand side, domestic use of U.S. burley is declining in the midst of higher taxes, smoking restrictions, shifting of U.S. cigarette production overseas, and technological changes in cigarette manufacturing. After three straight years of export growth to record high levels, U.S. burley exports fell by more than 40% last year, and were down 12% over the first seven months of 2009. Thus, after several years in early post-buyout era, when total U.S. burley disappearance was in the 250-300+ million pound range, it will likely decline below 200 million pounds for the 2009-2010 marketing year. However, favorable exchange rates between the U.S. and Brazil are resulting in a narrowing of the price difference between U.S. and Brazilian burley. Combined with a rebounding world economy and emerging markets, this could entice cigarette manufacturers seeking flavored burley to reevaluate U.S. burley in their purchasing and blending decisions.

With higher 2009 U.S. and world supplies, reportedly excessive inventories of lower quality U.S. tobacco held by manufacturers from previous crops, and declining demand, quality will be an even greater factor in determining the success of the 2009 U.S. burley market. Excellent quality burley, based on contract prices/incentives should continue to gross in the \$1.70s and \$1.80s/lb. However, lower quality tobacco within contracts will likely receive noticeable price discounts, while lower quality tobacco outside of contracts could yield very disappointing offers. Auction warehouse operators and co-op officials have been assessing various marketing alternatives for the anticipated excessive burley that does not receive an acceptable price.

Dark Tobacco: Dark tobacco acreage and production is down considerably in 2009, following an excessive build-up last year. According to USDA’s September 09 crop report, dark fire-cured acres fell 11%, while dark air-cured acreage was off 28%, as buyers pulled back considerably from the big boost in contract volume during 2008. Total U.S. dark fired production is pegged by USDA (September 2009 crop report) at 54.5 million pounds, compared to 62.2 million pounds in 2008, and crops generally around 40 to 50 million pounds in previous years. For dark air-cured, USDA is projecting a 2009 crop of 18.7 million pounds versus a massive 25.3 million pound crop last year and more typical crops of 10 to 15 million pounds during the early years of the post-buyout era. (It should be noted that some industry officials believe USDA is too optimistic on their 2009 dark estimates.) The dramatic drop-off in dark tobacco production is totally supply, not demand, driven. Snuff consumption, the primary user of dark tobaccos, has been increasing steadily over the past two decades in response to successful product promotion, emerging smoking restrictions, and reduced health risk claims. However, snuff consumption/production has been somewhat stagnant during the first half of 2009. Dark air-cured prices are expected to average around \$2.25/lb for 2009 and \$2.55/lb for dark fire-cured – slightly above last year’s and pre-buyout prices.

Value of Kentucky Tobacco Production: Despite a net loss in acres (burley up 3,000 acres, and dark down 3,500 acres), the value of Kentucky tobacco production (if a decent quality crop materializes) will likely be near last year’s \$382.6 million level, representing the highest valued crop during the post-buyout era. However, the anticipated burley supply/demand balance and stagnant dark tobacco consumption entering 2010 may cause both production needs and value to decline next year, unless the market observes a resurgence in burley export demand.



2009 Tobacco Grower Research

Jane Starnes, Center for Tobacco Grower Research, University of Tennessee

Laura Powers, Extension Associate, University of Kentucky

The Center for Tobacco Grower Research (CTGR) is a university-based project with a mission to conduct timely research in the areas of tobacco production, economics, and markets to provide information that will support the sustainability of U.S. production of burley, flue-cured, dark and other types of tobacco. This summary shares a few highlights of the 2009 Annual Mail Survey of Current and Former Tobacco Growers for Kentucky.

Participation - Kentucky had the highest number of participants among all 14 states surveyed. Of the 3,698 surveys returned, 1,753 surveys were from Kentucky, accounting for 47% of total participation. Approximately 53% (935) of those survey participants from Kentucky were active tobacco producers.

Farm Structure - Based on the mail survey, the average burley farm in Kentucky planted approximately 16 acres in 2008 (no change from 2007), compared to an average of 14.5 acres for all states. Average dark tobacco acreage per farm in 2008 was 24.1 acres for dark-fired and 9.5 acres for dark air, showing an increase from 18.9 and 7.8 acres, respectively, from 2007.

Notable findings pertaining to Kentucky include the following:

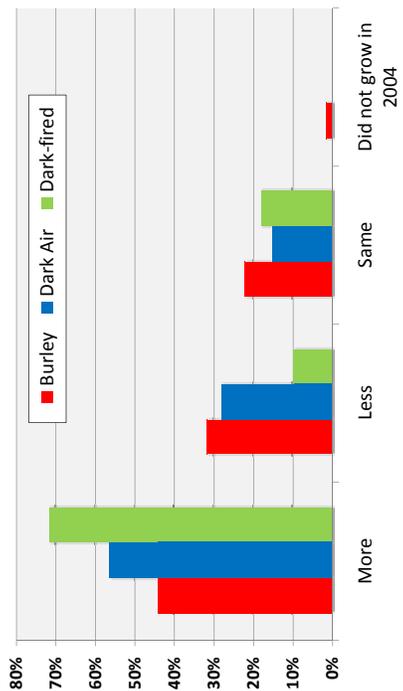
- As of 2008, only 44.3% of active burley growers were growing more tobacco than they did before the buyout. However, 56.4% of dark-air growers and 71.7% of dark-fired growers produced more in 2008 than they did in 2004 (pre-buy-out). (Chart 1)
- Burley and dark-fired producers are, on average, slightly older than dark air producers. Average age of burley and dark-fired producers was between 51 to 60 years, compared to 41 to 50 years of age for dark air cured growers. (Chart 2)
- Growers of all types of tobacco agreed that the price of tobacco, rising cost of fertilizers, and uncertainty about the future profitability of tobacco were the top considerations in deciding to continue tobacco production.
- Roughly 40% of all growers agreed that finding labor is difficult. (Chart 3)
- Dark-fired growers depend on the H-2a program significantly more than other types of tobacco producers. (Chart 3)
- Family members and local labor are more prevalent in burley and dark-air cured tobacco farms. (Chart 3)
- 69% of burley growers expect to still be raising tobacco in 5 years, compared to 77% and 79% of dark air and dark fire cured tobacco, respectively.
- Only 37% of burley growers expect to be growing tobacco in 10 years, compared to 61% of dark air and dark fire cured growers.

Important Sources of Information - Mail survey respondents were asked to rank the importance of different sources of information to help them make production decisions. Overall, results show that county agents and local extension meetings provide the most important sources of information in helping make good production decisions. While the category “other farmers” received slightly more responses, more growers assigned “county agents and meetings” as “extremely important” than any other source of information. (Chart 4)

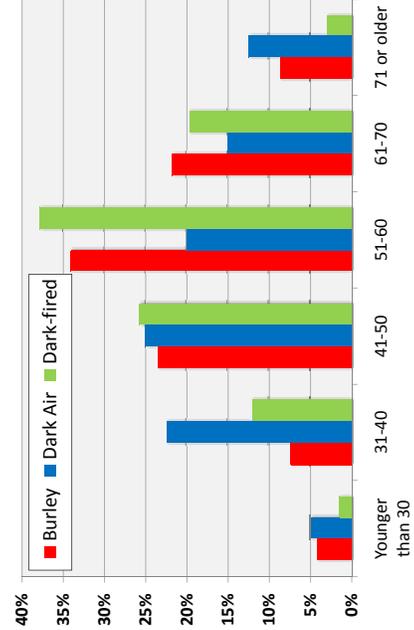
Contact and Additional Information:

Information for this report is based on the 2009 CTGR Annual Mail Survey of Current and Former Tobacco Growers. Center for Tobacco Grower Research, University of Tennessee, 2621 Morgan Circle, 302B, Knoxville, TN 37932
1-866-974-0414 ctgr@utk.edu <http://www.TobaccoGrowerResearch.com>

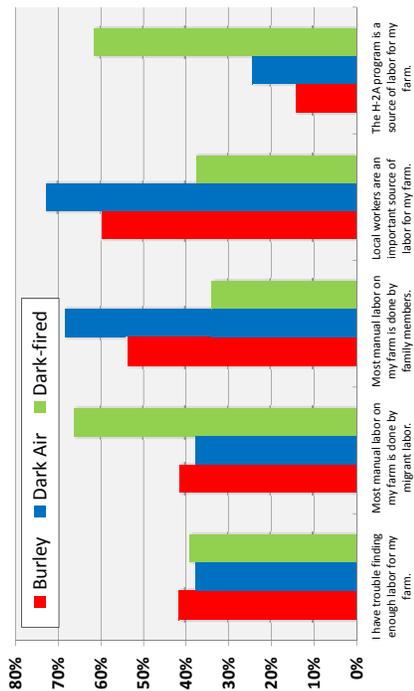
**Chart 1: 2008 Acreage Compared to 2004
Burley, Dark Air, & Dark-fired Farms in Kentucky**



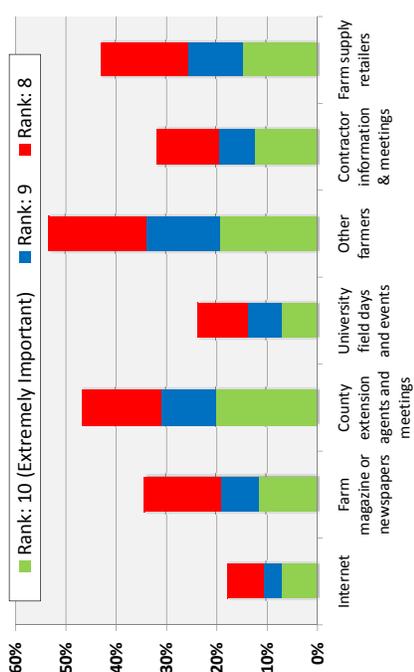
**Chart 2: Percent of Kentucky Growers in Age Group
by Primary Type of Tobacco Grown**



**Chart 3: Percent of Growers
Agreeing with Labor Statements**



**Chart 4: Important Sources of Information for
Production Decisions: % Responding "Very Important"**



Beef
Situation & Outlook 2009-10
Kenny Burdine

2009 Summary

The year 2009 was a very mixed bag for beef cattle producers. Coming off two consecutive drought years, forage production was much improved as producers generally enjoyed adequate moisture. Pasture conditions and hay production were significantly better than the previous two years. As a result, hay supplies greatly eased, pushing hay prices down for the second straight year. Despite the more cooperative weather, it appears that herd liquidation is ongoing in Kentucky.

Calf prices rallied nicely from late 2008 levels and gained about \$10 per cwt. from January to May. Prices for 500 to 600 lb medium and large frame #1 steers peaked at just over \$105 per cwt on a state average basis. They remained above \$100 through August when the fall price declines began. By the end of September, these prices had moved into the mid-low \$90's. Heavier feeder cattle made their price peak in July 2009, and then saw the same weakness that affected calf prices in September. The fall price declines in feeder cattle markets have been especially steep since 2006 and are creating major challenges for producers who wean and precondition calves in the fall and early winter.

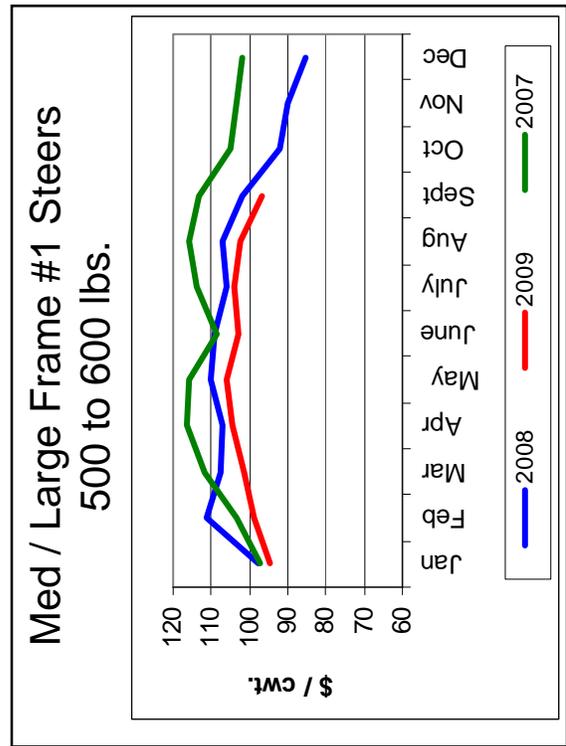
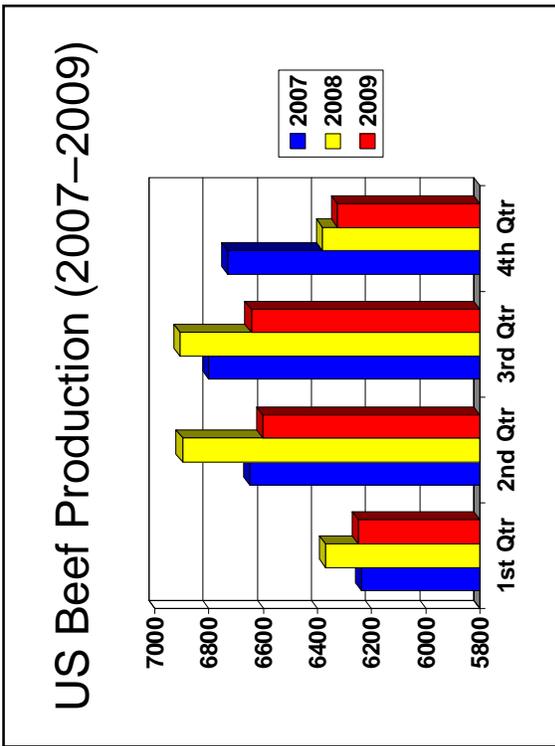
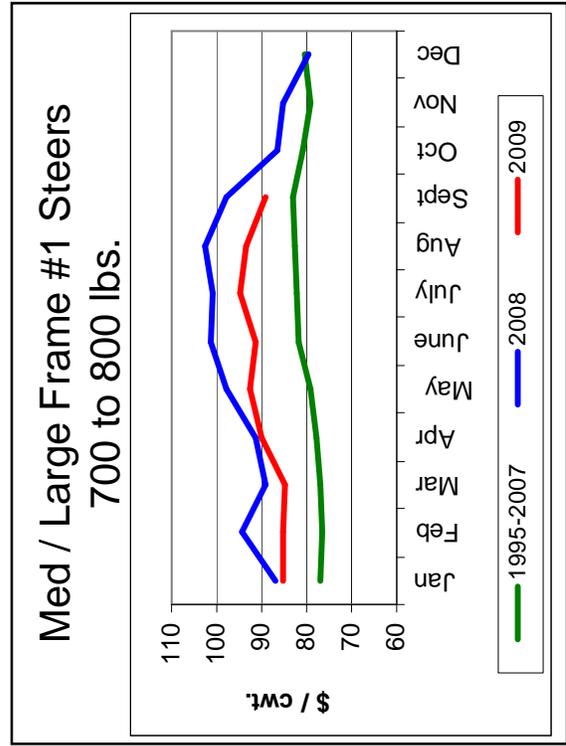
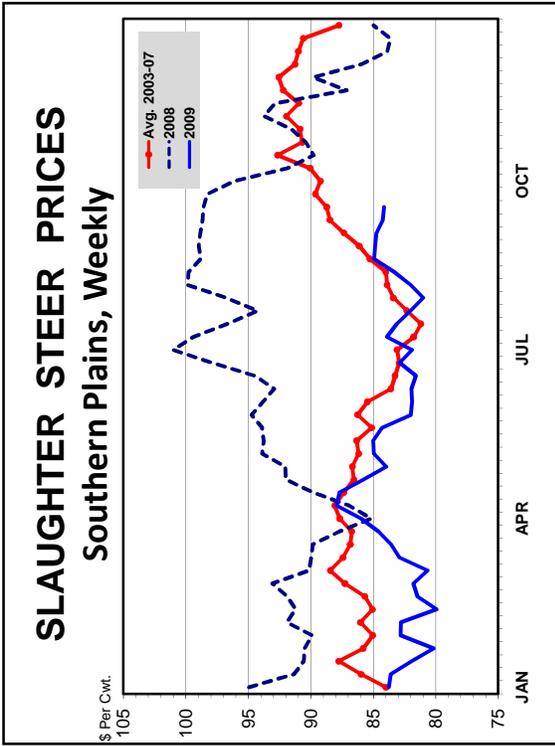
Outlook for 2010

Most cow-calf operators are struggling to cover their costs with current calf prices. However, despite the widespread pessimism and challenges that currently exist, most supply-side fundamentals are reasonably positive for feeder cattle. Beef cow numbers are lower than they have been since 1963. Beef cattle producers have been further helped by the 2009 corn crop, which will be very close to another production record.

However, consumer demand for beef has been greatly affected by the weak US economy and the near double-digit unemployment rate that has accompanied it. Today, the cattle market seems to be looking for direction from the demand side. It would be unusual for consumer demand to show vast improvement until spring. Hopefully, improved wheat grazing conditions to the West will set a stronger undertone for the market than was the case in 2008. Major price gains will have to come from improvement in the slaughter cattle market, which would be fueled by consumer demand and boxed beef movement.

The price declines we are currently watching are likely to continue into fall and early winter. Calf prices may well move down into the upper \$80's and low \$90's on a state average basis between now and the end of the year. However, sharp improvement can be expected closer to spring of 2010.

It is important to remember that when the US economy pulls out of recession, US beef demand will improve with it. Given the reduction in beef cow numbers recently, this demand improvement will be experienced with lower beef production. This combination should mean significant price improvements are likely in the future. The million dollar question is, "when?".



Dairy
Situation & Outlook 2009-2010
Kenny Burdine and Curtis Mahnken

2009 Summary

Most dairy producers will be glad to turn the page on 2009, a year that saw sizeable losses throughout the industry. The US All Milk price began the year below any month in 2008 and reached a low \$11 range per cwt. by the summer quarter. By year's end, the average annual milk price will likely be around \$6 per cwt below 2008. The milk-feed price ratio started 2009 at 1.59 and reached a high of only 1.76 by August, after hitting a low of 1.45 in June. It is generally considered profitable to buy feed and produce milk when this ratio meets or exceeds 3.0. This hasn't been the case since November 2007.

Milk production appears to have finally decreased, as a slight increase in milk per cow and good milking temperatures in the upper Midwest were not enough to offset decreasing milk cow numbers. However, the production decrease was quite small, likely around 1% from 2008 levels. Kentucky began the year with an estimated 86,000 dairy cows left in production. With the challenging climate, and three rounds of CWT buyouts, this number has probably decreased once again.

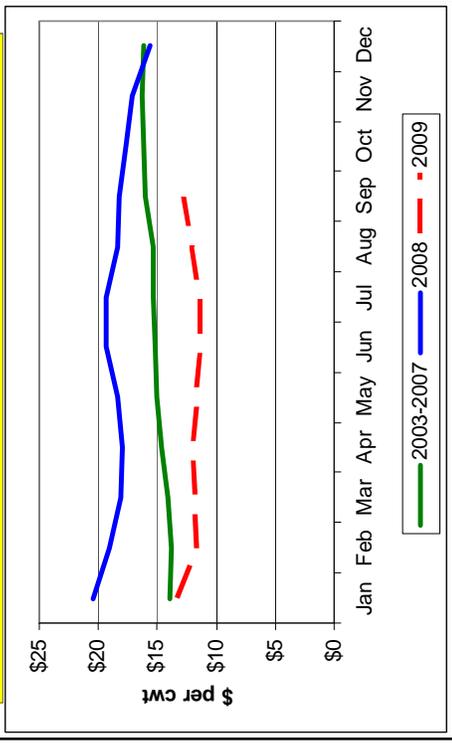
Like so many commodity markets, demand was the real story in 2009. While fluid milk is thought to be a staple, many other dairy products are not. Further, the weak global economy drastically affected dairy product exports. Cheese, butter, and non-fat dry milk have been below 2008 levels all year. Dry whey prices spent the first half of 2009 below 2008 levels, but have stayed above year ago levels since mid-summer.

Outlook for 2010

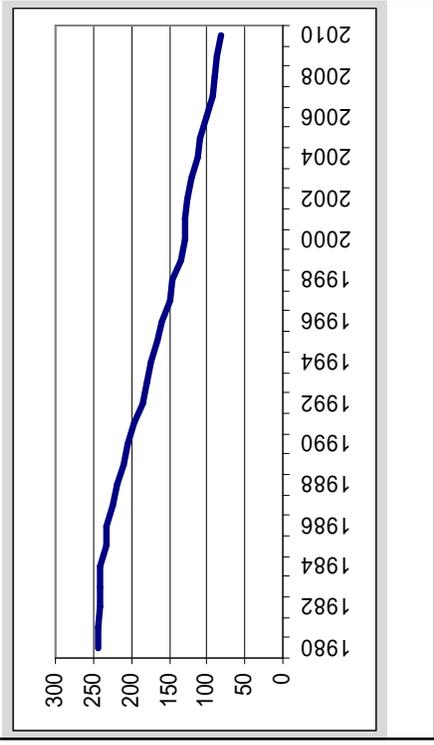
Milk production decreases are likely to continue in 2010, although they will likely be moderate in size. Further, in a demand-driven market like we have seen over the last few years, small changes in production levels are only likely to have small price impacts. Predicting dairy prices in 2010 will require a firm understanding of the macroeconomic trends.

The strength in milk prices that was seen in 2007 and 2008 was largely driven by exports. Some of this was due to growing demand in many areas, while additional support was derived from drought in Australia. While many macroeconomists are expecting some improvement in the US economy, it is unrealistic to expect decreased international competition from weather. Most analysts are predicting a \$2 to \$3 per cwt. increase in farm level milk prices from 2009 to 2010. This would put the US All Milk price in the \$14 to \$16 range and Kentucky mailbox prices in the \$15 to \$17 range. While price improvement is welcome, it is unlikely that many dairy producers will see profit in 2010 with production costs at their current levels. The question becomes, how many dairies will survive to experience the next higher price cycle?

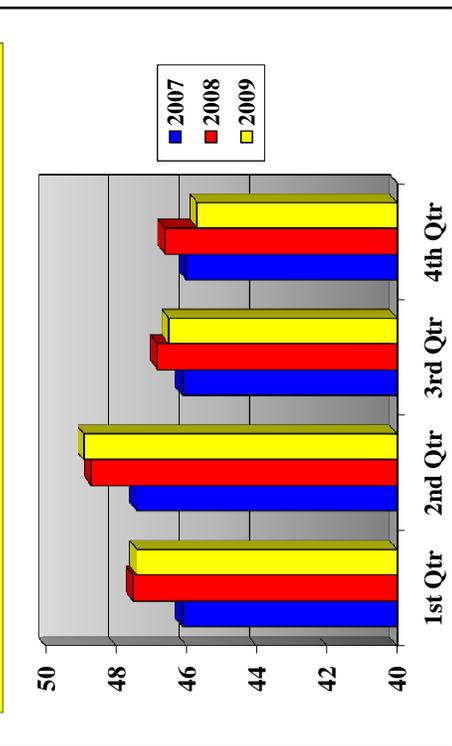
US All Milk Price



KY Dairy Cow Inventory



US Milk Production (billion lbs)



Milk-Feed Price Ratio US, 2006-09

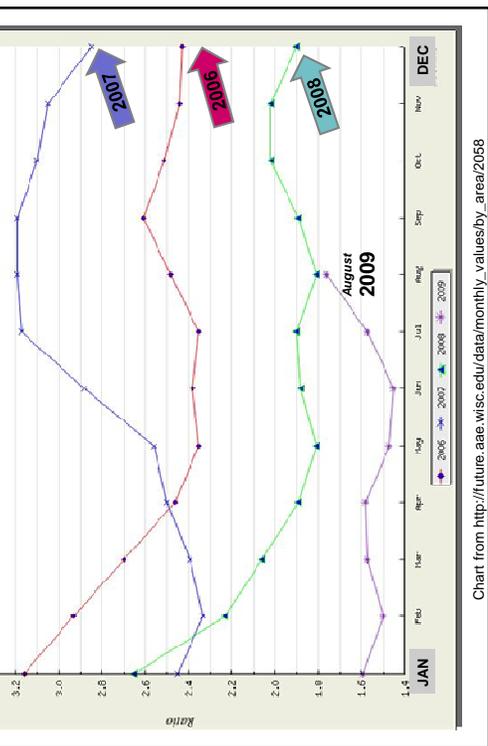


Chart from http://future.aae.wisc.edu/data/monthly_valuesby_area/2058

Hogs

Outlook 2009-10

Lee Meyer

A 2009 USDA Economic Research Service report best describes the transformation of U.S. Livestock Agriculture (EIB 42, January 2009) and quantifies the dramatic changes in the hog industry. According to the report, “about 40 major integrators now coordinate production of 75 percent of the hogs marketed annually in the U.S.” (p. 8). The farrow to finish system, which dominates in Kentucky, has changed. Nationally, only 18% of the hogs come from this type of operation. Over 75% come from feeder to finish hog operations and two-thirds of the hogs from the feeder to finish model are sold on a production contract. The feeder-to-finish farms are also much larger – selling an average of 4,600 hogs in 2004, compared to 1,472 head for the farrow to finish farms.

The extensive use of contracting and control by a small (40) number of integrators probably has a major impact on supply adjustments to market conditions. But that is not well understood. It is certainly much different than 50 years ago when managers of small hog operations dramatically changed production levels, leading to the well known three to six year hog inventory and price cycles.

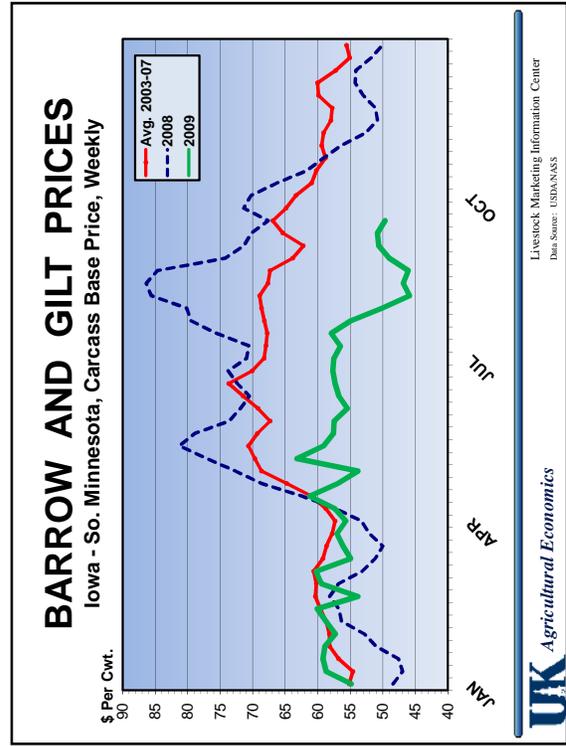
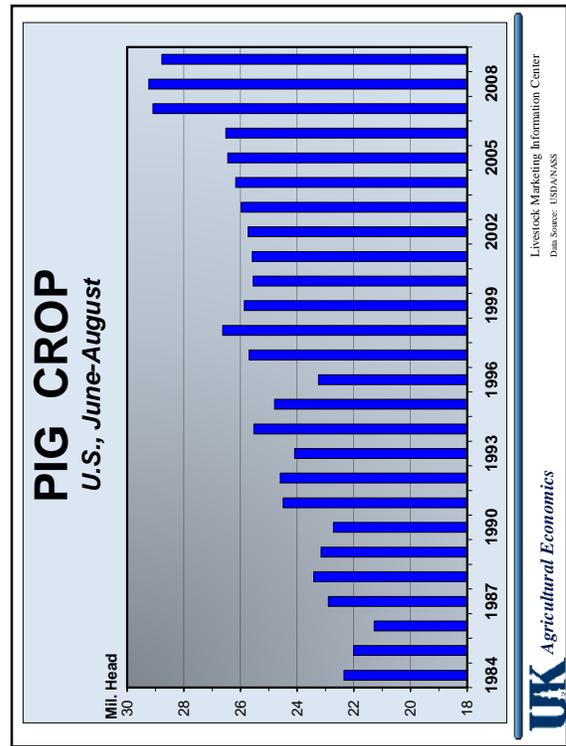
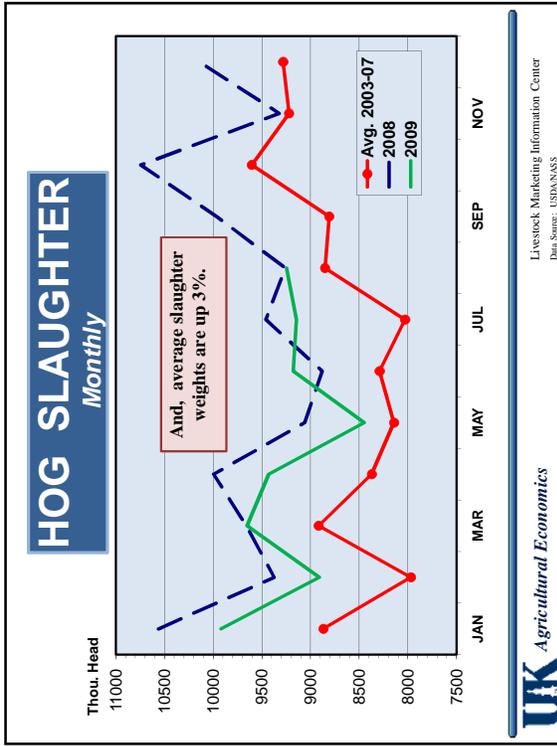
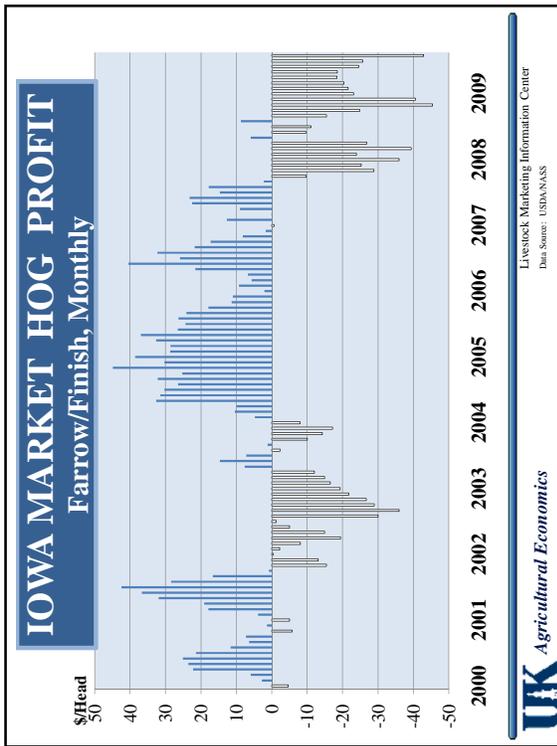
Profits from 2004 into 2008 were based on strong hog prices (they averaged in the mid \$60 on a carcass weight basis, in the mid to upper \$40s on a live weight basis), and cheap feed. The response was continued increases in production (up 13% over the period), but most of that increase was exported. Exports increased from 11% of production up to 20% by 2008.

The demand side has been impacted in three negative ways. The weak economy has reduced consumer expenditures. This trend is likely to continue, even after the economy improves and spending rates increase. Second, exports, while still high, declined in 2009. And third, the H1NI flu (formerly known as “swine flu”) unavoidably impacted consumer attitudes about pork.

The result has been much lower prices and extensive financial losses in 2009. Market hog prices are down by a third – currently at \$48/cwt. (carcass) compared to a \$75 average during the third quarter of 2008.

The combination of bad news has had an impact on production. The most recent hogs and pigs report indicated a 3% decline in sow numbers and a smaller pig crop as well. Farrowing intentions for the next two quarters are both down by 3%. However, as the industry continues to improve its “pigs saved” percentage, actual production will not decline by much.

Prices are likely to improve in 2010 on the basis of smaller supplies and an improving economy. If exports rebound as forecasted by the USDA, prices could improve by 10%, averaging in the low \$60s (which would be the mid \$40s on a live weight basis). However, the increase will not begin until later in 2010. Futures markets are modestly more optimistic, with summer contracts trading in the \$70s. However, the industry is not expected to return to profitability for six to eight months.



Poultry
Situation & Outlook 2009-10
Lee Meyer

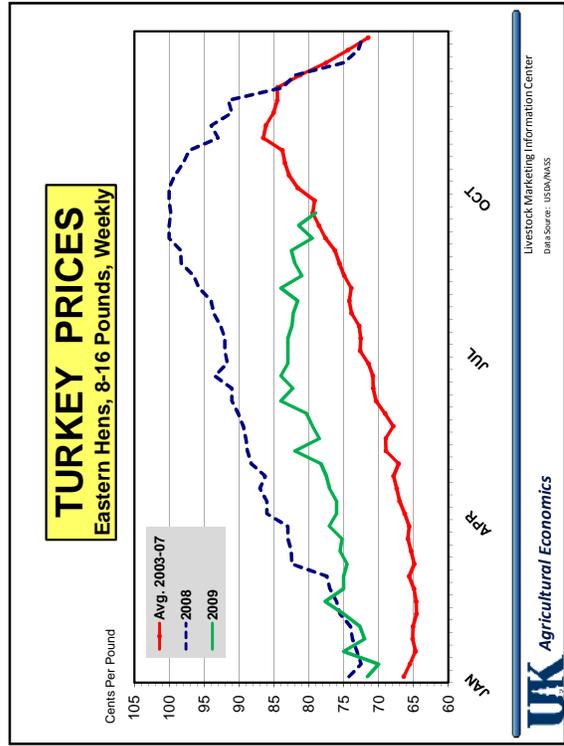
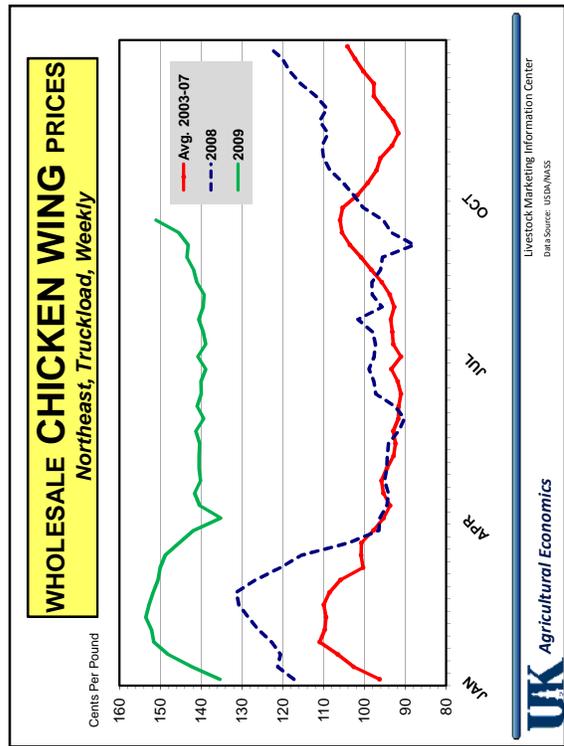
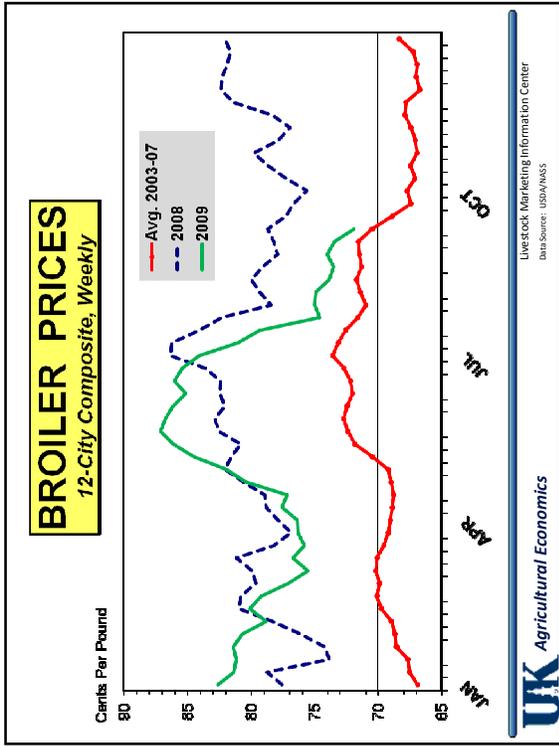
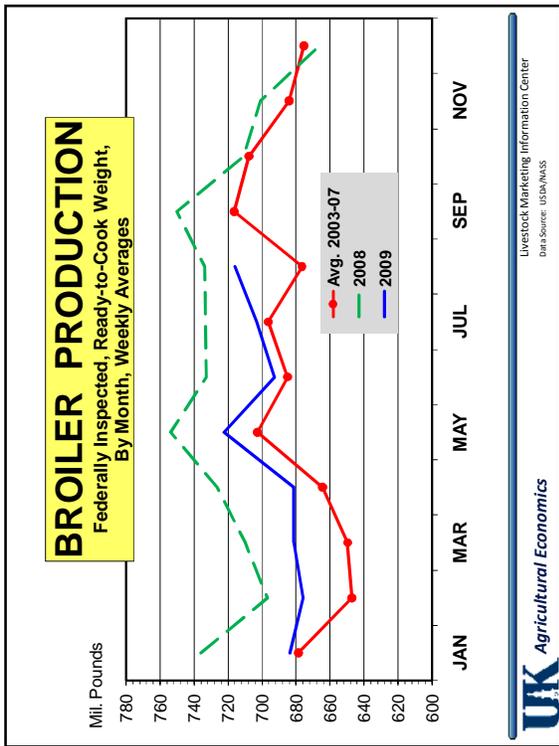
The broiler industry has been hit very hard by the high feed costs of two years ago. For the first time in recent years, production did not increase in 08-09. In fact, total broiler production for 2009 will probably be down 4 percent from 2008. Another change was the drop in exports – down 6% from last year. The industry typically exports almost 20% of its production. That proportion will stay about the same, with declines in both production and exports.

The high production costs and flat prices caused problems in the industry. The largest company, Pilgrim's Pride (which operates in western Kentucky, with a plant in Mayfield) declared bankruptcy. JBS, a Brazilian-owned company which owns Swift and other U.S. meat processors, bought a majority share of Pilgrim's Pride, rescuing it and adding poultry to the JBS line of products.

Prices are going to average about \$.80/lb. this year, similar to 2008. The steady price hides some changes on the product side. Prices for both breast meat and leg quarters have declined from 2008, but wing prices are up nearly 50% and selling at a premium over boneless/skinless breast meat.

The broiler forecast for 2010 is for production to increase about 2%, with prices near the level of the past two years (about \$.80/lb.) Exports may decline slightly due to increased competition from other producing/exporting countries like Brazil.

Turkey production will be down about 8% in 2009, but with weak demand, prices have also declined. The national average turkey price will be about \$.80/lb., the lowest price since 2006. The stock of frozen turkeys is about 20% over the 2008 level, so fourth quarter (holiday season) prices will also be down from last year's level. The USDA is forecasting slightly higher production in 2010, but also stronger demand, so prices should rise modestly.



Sheep & Goat

Outlook 2009-10

Lee Meyer

According to USDA, sheep numbers continue to gradually decline. As of January 1, 2009, there were 5.7 million sheep in the U.S., about 3% fewer than a year earlier. This decline over the past 10 years has totaled 20%, and the declines since 1960 have been especially dramatic, as shown in the Sheep and Lamb Inventory chart. Per capita consumption has averaged about one pound, and may dip under that level in 2010, as total U.S. production is expected to be about 166 million pounds. Imports are actually greater than domestic production and are expected to be 185 million pounds in the coming year, according to USDA.

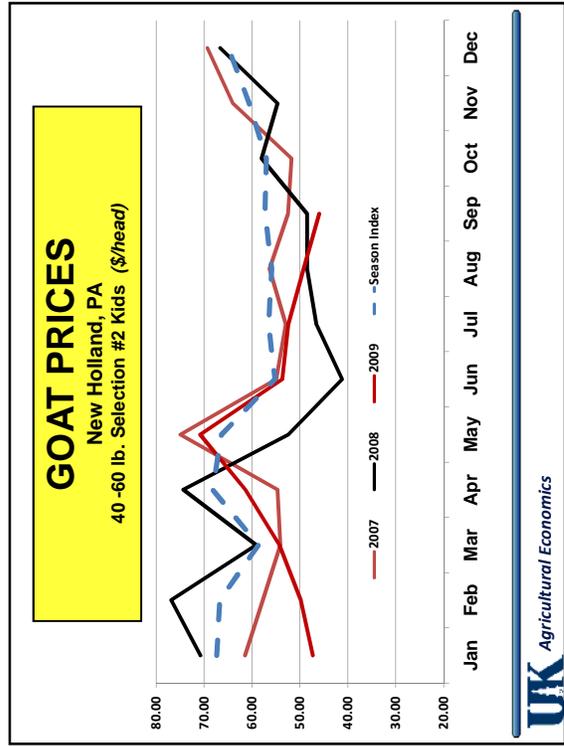
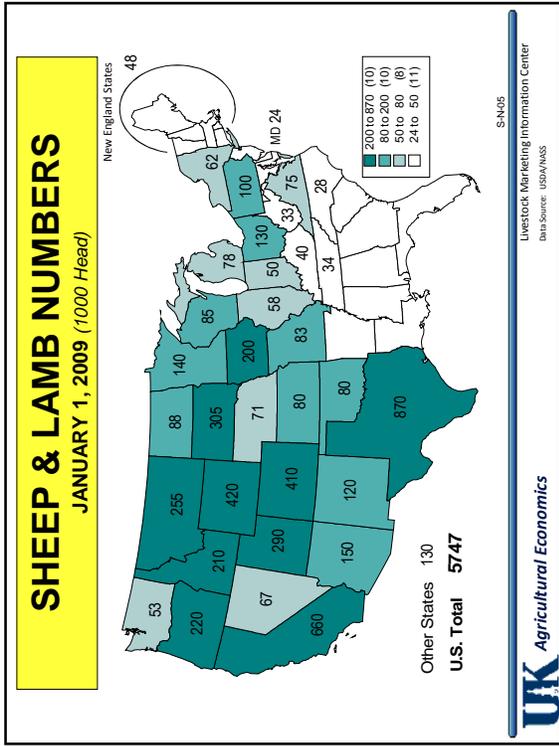
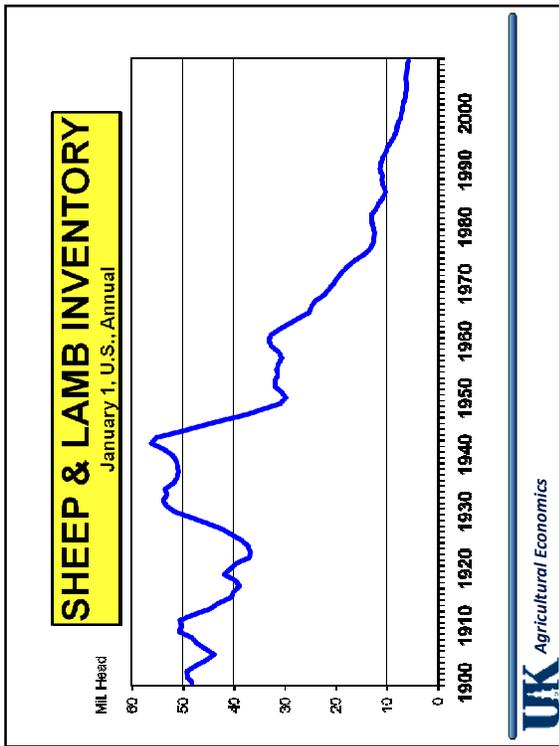
Prices for slaughter lambs have been averaging around the \$2/lb. mark for the past several years. They were slightly lower in 1997, peaked at \$2.08 in 2008, and are expected to average just under \$2 per pound in 2009.

Domestic production is likely to decline further in 2010, but imports will probably make up the difference. Like the other meats, higher 2010 prices are dependent on a stronger economy. This is especially true for lamb, since a large portion is consumed in the restaurant industry.

Kentucky's lamb sector has seen modest growth, with the inventory increasing by 3,000 head, rising to a total of 40,000 ovine. Direct to consumer and food service sales are a common marketing method, and capture somewhat higher net prices than commercial sales. The cost of processing (including the disposal of offal) is a major impediment to growth of this enterprise.

Kentucky's meat goat industry seems to be maturing. It grew by about 20 percent over the last 6 years, but numbers dropped by eight percent between Jan. 1, 2008 and 2009. The high cost of feed was likely a major cause of the decline, but would mostly impact operations that were not grazing based.

The highest price goat markets in Kentucky are at the graded sales. Recent prices for Selection #2, 40 -60 pound kids were in the \$115 to \$123 per cwt. range. The Goat Price (New Holland) chart shows the summer decline in goat prices, which has held into the fall. (Note that these prices are on a per head basis.) The New Holland (Pa.) market is the major eastern market and is the price benchmark. The dotted line shows the typical seasonal pattern in slaughter kid prices, indicating that prices should increase into the coming fall and winter months.



Kentucky Grain Market Situation & Outlook 2009-10

Cory G. Walters

Corn, soybean, and wheat prices have declined since this time last year and continue to be volatile. Wheat price has declined substantially due to increased world stocks and favorable growing conditions. Corn price has receded more than soybean price due to higher ending stocks and lower crude oil prices.

U.S. corn production is estimated to be 13.0 billion bushels, up 7 percent from 2008. The increase in production is based upon the potential of a record yield (161.9 bushels per acre, 8 more bushels per acre) and a slight increase in planted acreage over 2008 (1 million more acres). Favorable growing conditions driven by average temperatures and generally good soil moisture throughout the Corn Belt have helped bring potentially record yields. For Kentucky, corn production is expected to be 175 thousand bushels, up 23 thousand bushels from 2008.

On the corn use side, the United States Department of Agriculture (USDA) increased feed and residual; food, seed and industrial (including ethanol); and exports. Total use is forecast to increase 980 million bushels (8.1%) over last year. With increased production and use, ending stocks are expected to be almost unchanged from 2008 at a relatively high amount of 1.635 billion bushels.

The 2009 Chicago Board of Trade (CBOT) December corn futures contract is trading around \$3.39 per bushel. March, May, and June CBOT corn futures contracts are trading around, \$3.52, \$3.60, and \$3.69 per bushel, respectively. The corn market is experiencing a positive carry between futures contracts (i.e., differed futures contract is greater than the nearby contract). When carrying charges are greater than storage costs, producers should strongly consider storing the crop, sell March, May, or June futures and profit from the difference.

Soybean production is estimated to be a record at 3.25 billion bushels, up 9.66 percent from 2008. The production increase was caused by an increase in both expected yield (42.3 bushels per acre, 2.7 more bushels per acre) and planted acreage (2 million more acres). For Kentucky, soybean production is expected to be 60 thousand bushels, up 13 thousand bushels from 2008.

On the soybean use side, the USDA increased crushings and residual while keeping exports unchanged and slightly decreasing seed use. Overall, a slight increase in use is expected. With increased production and use, ending stocks are expected to double from the very tight carry-out in 2008, to 220 million bushels.

The 2009 Chicago Board of Trade (CBOT) November soybean futures contract is trading around \$9.16 per bushel. January, March, and May CBOT soybean futures contracts are trading around, \$9.23, \$9.24, and \$9.19 per bushel, respectively. The soybean market is experiencing a very small positive carry. When the carry is less than storage costs, producers should consider selling the crop at harvest or storing the crop un-priced, in hopes of a price rally.

Wheat production is estimated at 2.18 billion bushels, down 12.64 percent from 2008. The decrease in production was caused by a decrease in yield (1.6 fewer bushels per acre) and fewer planted acres (3.3 million fewer acres) over 2008. For Kentucky, wheat production is expected to be 24 thousand bushels, down about 9 thousand bushels from 2008. Wheat use is expected to decline slightly from 2008.

2010 Outlook. Expect price volatility to remain in the commodity markets. Producers should be developing a marketing plan that includes break-even prices using current fertilizer and commodity price information, selling future crop only when prices are greater than break-even, selling in small percentages, selling during price rallies, and considering purchase of a revenue crop insurance product to protect revenue against both yield and price declines.

**The information provided here is based on data available in early October 2009.*

USDA SUPPLY/DEMAND BALANCE SHEET: CORN		
	09-10p	% Change from Last Year
Millions of Acres		
Acres Planted	87.0	+1.2%
Acres Harvested	80.0	+1.9%
Bu./Harvested Acre	161.9	+5.2%
Millions of Bushels		
Beginning Stocks	1,695	+4.4%
Production	12,954	+7.0%
Total Supply	14,660	+6.7%
Use:		
Feed and Residual	5,350	0.0%
Food, seed, & industrial	5,475	+10.7%
Ethanol for fuel	4,200	+14.3%
Exports	2,200	+18.9%
Total Use	13,025	+8.1%
Ending Stocks, % of Use	1,635	-3.5%
U.S. Season Avg. Farm Price, \$/ Bu.	12.6	-10.8%
	\$3.35	-17.9%

Source: WASDE, 9/11/09

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USDA SUPPLY/DEMAND BALANCE SHEET: SOYBEANS		
	09-10p	% Change from Last Year
Millions of Acres		
Acres Planted	77.7	+2.6%
Acres Harvested	76.8	+2.9%
Bu./Harvested Acre	42.3	+6.8%
Millions of Bushels		
Beginning Stocks	110	-46.3%
Production	3,245	+9.7%
Total Supply	3,366	+5.9%
Use:		
Crushing	1,690	+1.8%
Exports	1,280	0.0%
Seed & Residuals	175	+35.7%
Total Use	3,145	+2.5%
Ending Stocks, % of Use	220	+100.0%
U.S. Season Average Farm Price, \$/Bu	7.0	+95.2%
	\$9.10	-9.0%

Source: WASDE, 9/11/09

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USDA SUPPLY/DEMAND BALANCE SHEET: WHEAT		
	09-10p	% Change from Last Year
Million Acres		
Acres Planted	59.8	-5.2%
Acres Harvested	50.4	-9.5%
Bu./Harvested Acre	43.3	-3.6%
Million Bushels		
Beginning Stocks	667	+118.0%
Production	2,184	-12.6%
Imports	110	-13.4%
Total Supply	2,961	+1.0%
Use:		
Food/Seed	1,033	+2.9%
Feed & Residual	235	-4.5%
Exports	950	-6.4%
Total Use	2,218	-2.1%
Ending Stocks	743.0	+11.4%
Ending Stocks, % of Use	33.5	+13.8%
U.S. Season Aver. Farm Price, \$/ Bu.	\$5.10	-32.9%

Source: WASDE, 9/11/09

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Crop Planting Decisions **For Spring 2010** *Greg Halich*

Expected commodity prices for corn and soybeans for fall 2010 are considerably less than what was expected for the 2009 crop during the fall of 2008. A year ago, the expected new crop corn price was \$4.25/bu and the expected soybean price was \$9.00/bu for fall 2009. Looking ahead to the fall of 2010, the expected corn and soybean prices are \$3.50/bu and \$8.25/bu, respectively. These prices reflect a 20% drop from fall 2008. However, expected input prices are also considerably lower for the 2010 production year. The total expected production costs last year were \$485/acre for corn and \$250/acre for soybeans (these figures do not include land rent but do account for depreciation and other non-cash costs). For the 2010 crop, the same costs are expected to be \$350/acre for corn and \$200/acre for soybeans. The bulk of this reduction is in lower fertilizer and diesel fuel prices. As a result, profit is expected to be roughly the same in 2010 as was expected for the 2009 crop, one year ago. Thus, the decreases in input costs are essentially equal to the decreases in commodity prices.

Baseline Scenario: Net returns (average for rotational corn and soybeans) calculated at current fall 2010 futures prices and assuming a $-\$0.25$ basis for corn and a $-\$0.50$ basis for soybeans are approximately (*elevator prices of \$8.25 soybeans and \$3.50 corn*):

- \$140 for 125 bushel rotational corn ground
- \$195 for 150 bushel rotational corn ground
- \$255 for 175 bushel rotational corn ground

Note: This does not include land rent but accounts for depreciation and other non-cash costs.

Increase in Commodity Prices: If prices increase $\$0.50$ /bu for corn and $\$1.25$ /bu for soybeans from the baseline scenario then expected net returns will increase (*elevator prices of \$9.50 soybeans and \$4.00 corn*):

- \$200 for 125 bushel rotational corn ground
- \$265 for 150 bushel rotational corn ground
- \$330 for 175 bushel rotational corn ground

Note: This does not include land rent but accounts for depreciation and other non-cash costs.

Decrease in Commodity Prices: If prices decrease $\$0.50$ /bu for corn and $\$1.25$ /bu for soybeans from the baseline scenario then expected net returns will decrease (*elevator prices of \$7.00 soybeans and \$3.00 corn*):

- \$85 for 125 bushel rotational corn ground
- \$130 for 150 bushel rotational corn ground
- \$175 for 175 bushel rotational corn ground

Note: This does not include land rent but accounts for depreciation and other non-cash costs.

The above figures would be most applicable in the regions of Kentucky that have good grain infrastructure and where anhydrous ammonia is used as the nitrogen source. Other regions will likely have slightly higher costs. Using reasonable land rents for the various land productivity types, the current baseline scenario looks profitable at current expected commodity and input prices.

Production Costs: Corn & Soybeans		
Inputs:	Corn (150 bu)	Soybeans (47 bu)
Seed	\$82	\$45
Nitrogen	\$45	\$0
P, K, and Lime	\$56	\$35
Pesticides	\$20	\$15
Total Inputs	\$203	\$95
Machinery and Labor	\$89	\$66
Other:		
Drying Grain	\$15	\$0
Crop Insurance	\$15	\$15
Misc.	\$15	\$15
Land Rent	\$0	\$0
Operating Interest	\$13	\$6
Total Other	\$58	\$36
Total Costs	\$350	\$197

Baseline Scenario \$ 8.25 Soybeans (elevator) \$ 3.50 Corn (elevator) \$.30-N; \$.30-P; \$.60-K			
	Net Revenue Corn	Net Revenue Soybeans	Net Revenue Rotation
125 bu corn	\$125	\$160	\$140
150 bu corn	\$195	\$195	\$195
175 bu corn	\$265	\$240	\$255

Note: Does not include land rent.

High Commodity Price Scenario \$ 9.50 Soybeans (elevator) \$ 4.00 Corn (elevator) \$.30-N; \$.30-P; \$.60-K			
	Net Revenue Corn	Net Revenue Soybeans	Net Revenue Rotation
125 bu corn	\$185	\$210	\$200
150 bu corn	\$270	\$255	\$265
175 bu corn	\$355	\$310	\$330

Note: Does not include land rent.

Low Commodity Price Scenario \$ 7.00 Soybeans (elevator) \$ 3.00 Corn (elevator) \$.30-N; \$.30-P; \$.60-K			
	Net Revenue Corn	Net Revenue Soybeans	Net Revenue Rotation
125 bu corn	\$60	\$110	\$85
150 bu corn	\$120	\$140	\$130
175 bu corn	\$180	\$175	\$175

Note: Does not include land rent.

Horticulture

Situation & Outlook 2009-10

Tim Woods

2009 Review: Just eight years ago, when Kentucky started to make a concerted push toward diversification and development of the horticulture industry, the value of all horticulture cash receipts was \$78.6 million, including floriculture, nursery, greenhouse, and sod (\$59.7), and produce (\$18.9). Kentucky's produce (vegetables/fruit) industry and green (nursery/greenhouse) industry have experienced steady growth over this period, even through a difficult economy. Current industry sales trends point toward 2009 gross sales winding up somewhere around \$115-\$120 million.

Produce: Gross produce receipts appear to be ahead of 2008 as more producers benefited from additional direct market channels, especially farmers' markets. Over 2,000 Kentucky vendors sold through farmers markets in 2009, and the number has been increasing annually for more than 5 years. Total sales for produce, according to 2007 Ag Census estimates, are primarily from direct market channels, although auction and other wholesale channels have also experienced healthy growth.

Preliminary planting intentions for 2009 (collected in '08) indicate an expected acreage increase for produce crops of 8% over all, reaching a total of around 14,000 acres. Fruit crop acreage was projected to be up slightly at an estimated 2,800 acres and vegetable crop acres estimated at 11,200. Kentucky had approximately 10,500 acres devoted to produce in 2002. The 2009 produce sales in the Southeast are projected as being similar to 2008.

Green Industry: The weak overall economy and relatively high input costs (especially labor), are preventing Kentucky's green industry from reaching its highest potential. Nationwide, this market is driven by new home construction and healthy consumer spending, which have been in a deep and extended slow down for the past 2 years. Greenhouses, sod operations, landscapers and mid-size nursery businesses experienced significant growth between 2002-06, but each have been in difficult times since. A regional survey of SE horticulture Extension specialists revealed sales for 2009 to be down somewhat or down substantially in 2009 (Figure 4).

2010 Outlook: Direct market, auction and independent grower-shipper wholesale sales will likely increase again next year. A number of important issues, however, will shape commercial fruit and vegetable production in Kentucky. The survey of the SE horticulture Extension specialists pointed to food safety standards and compliance, as well as labor management, as the top issues influencing production at this time. Gross sales will continue to be driven by higher-value direct marketing through channels like farmers' markets, and transactions directly from the farm and to foodservices or retailers. Direct marketing of produce has seen growth nationally over the past 10 years, holding true in Kentucky, as well (Figure 2). Wholesale opportunities will continue to expand as demands for local products remain strong in local markets. It is likely that overall produce acreage will experience a modest increase, resulting in sales growth for higher-value market channels.

Producer expectations for the next three years were evaluated in the 2008 Planting Intentions and Marketing survey. In terms of production acres, many growers were expecting to stay about the same for 2009, but the number of producers with plans to increase acreage substantially outpaces the number of producers with plans to downsize. As was the case in every market channel, Kentucky's horticulture industry is expected to maintain revenue or continue a modest rate of growth in 2010.

Table 1. Importance of Factors Influencing the 2009 Produce Season

❖ Labor management and availability (10)	1.8
❖ Variable input prices (1)	3.8
❖ Food safety standards & compliance (6)	3.9
❖ Direct marketing issues	4.6
❖ Concern for lower prices (4)	5.1
❖ Retailer consolidation and access	5.6
❖ Recession impact on premium/specialty products (1)	5.6
❖ Distribution cost/availability	5.8
❖ Uncertainty of government policies regulating production (1)	6.4
❖ Land prices and development pressures on ag (1)	7.3
❖ International trade pressures (1)	8.4

19 SE Hort. Ag Econ Specialists, and selected agents
1 = "most important"; 1st place vote in (.)

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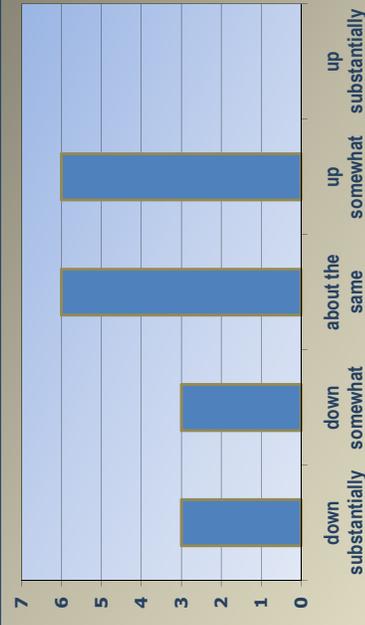
Table 2. Factors Increasing in Importance for the 2010 Produce Season

❖ Labor management and availability (4)	12 ^a
❖ Food safety standards & compliance (6)	12
❖ Direct marketing issues	11
❖ Uncertainty of government policies regulating production (2)	9
❖ Concern for lower prices (2)	9
❖ Variable input prices	9
❖ Recession impact on premium/specialty products (1)	7
❖ Retailer consolidation and access	5
❖ Distribution cost/availability	4
❖ International trade pressures	4
❖ Land prices and development pressures on ag	2

19 SE Hort. Ag Econ Specialists, and selected agents
n = number of 19 SE specialists; 1st place vote to be increasing in importance for 2010; 1st place vote in (.)

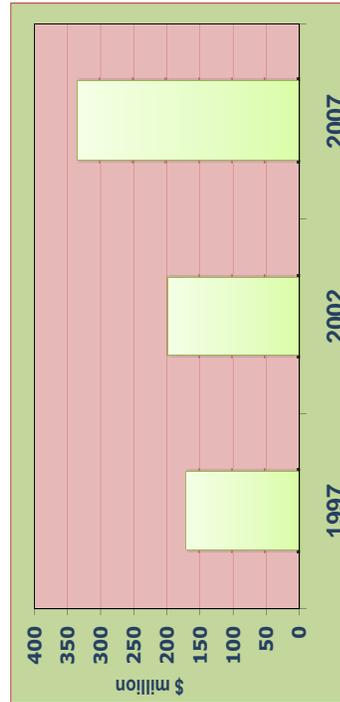
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Figure 1. Change in Annual Produce Sales Southeastern States, 2009



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Figure 2. U.S. Direct Market Sales Vegetables & Melons



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Source: Census of Agriculture, various years

Timber
Outlook 2009-10
Greg Halich

Current Situation*:

Kentucky's timber market has been struggling in 2009. Stumpage prices (prices paid to landowners for standing timber) for red oak, the predominate timber species in Kentucky, have continued downward to a value less than 50% of prices just five years ago. Stumpage prices for walnut have also experienced a significant decline for the second straight year, and prices for black cherry and hard maple, which were still high in 2008 by historical standards, fell sharply in 2009 (30% and 20% respectively in Ohio).

Although stumpage prices for white oak were down for the second straight year, a continued strong tie market propped up prices for lower quality timber, and as a result, stumpage prices for Kentucky white oak have not suffered as badly as regions with higher timber quality. Prices for yellow poplar, hickory, and ash are still quite low.

Recommendations:

As with the last two years' recommendations, I would generally not advise cutting high-quality red and white oak stands at this time. However, the railroad tie market has some potential. Although not as strong as 2008, this market is still doing well compared to the overall timber market. Hardwood stands of poorer quality, in need of thinning, are good candidates. Thinning these stands can improve the overall health and quality of the stand. In general, given low prices and a bleak outlook for improvement in the immediate future, harvesting quality hardwood timber is not recommended.

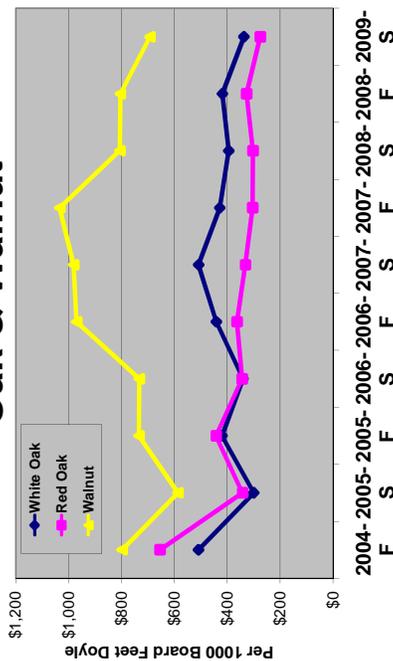
Timber prices could continue to drop in the next few years, but there is much potential for upward movement in the next 5-15 years. Timber is a long term investment and waiting for improved market conditions could prove more profitable. If the need to sell timber is unavoidable in the next 1-3 years, it is quite possible that prices may not get any better and could get worse. Be prepared to receive significantly less than what would have been expected in the middle of this decade.

A Warning for 2009:

The emerald ash borer is now confirmed inside Kentucky in numerous places and will be difficult to control at this point. Salvage cuts just ahead of the borer's path have the potential to flood already weak ash markets. Landowners should seriously consider liquidating ash trees before they get caught in this situation.

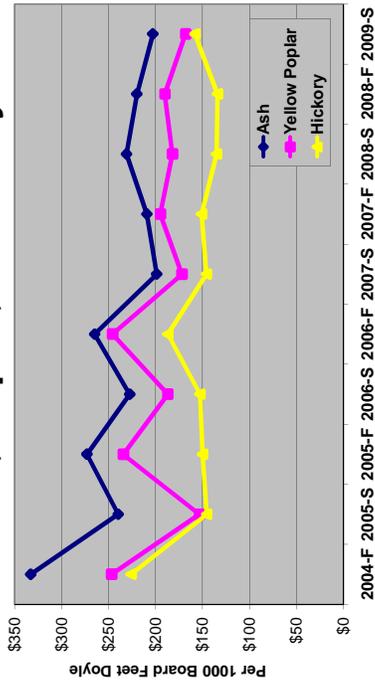
**Stumpage prices are based on data from surrounding states.*

Ohio Stumpage (2009 Dollars)
Oak & Walnut



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Ohio Stumpage (2009 Dollars)
Ash, Poplar, & Hickory



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Red Oak Guidance & Recommendations

1. Prices declined over 50% in recent years.
2. Much potential for upward movement in the long-term (5-15 years).
3. Possibility that it could get worse in short-term.
4. ***I would not sell quality red oak timber in current market, if you can wait.***

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White Oak Guidance & Recommendations

1. Stumpage prices for higher-grade timber have declined.
2. KY stumpage hasn't decreased as quickly, due to a continuously strong tie-market.
3. ***I would only sell stumpage on poorer quality white oak stands, and stands that need timber stand improvement.***

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An Introduction to Markets for Ecosystem Services

Jack Schieffer

Recent policy actions are bringing the term *ecosystem services* to the attention of agricultural producers. The 2008 Farm Bill led to a new office in the USDA to promote agricultural participation in markets for ecosystem services. One example of such a market is the market for carbon offsets proposed in the Waxman-Markey bill, which would provide a new revenue source for agricultural producers who can contribute to reductions in levels of greenhouse gases.

What Are Ecosystem Services?

Ecosystem services is a label for the benefits that natural resources provide, in addition to the tangible products that are derived from them. These services include improved water and soil quality, flood control, and wildlife habitats.

- The ecosystem service relevant to carbon offset markets is *carbon sequestration*, which occurs when plants and soil soak up carbon dioxide and other greenhouse gases, thereby reducing the potential risks of climate change.

Most ecosystem services take the form of *public goods*.

- Public goods are *non-excludable*, meaning that it's not feasible to cut off a particular person from receiving the benefits (if they don't pay, for example).
- This leads to a problem known as *free-riding*: many people won't pay for the benefits, so there's not much incentive for someone to produce the public good in the first place.
- Because of free-riding, public goods are under-produced, so many potential benefits (greater than the costs) are lost.

Land owners make choices that affect the mix of ecosystem services and other benefits (e.g. crop production) that the land generates. (See figure 1.)

- How much acreage is allocated to crops vs. forest, how much fertilizer to apply, etc.
- Because of free-riding, land owners often tilt the balance toward marketable goods and away from ecosystem services, even though the latter can be valuable.

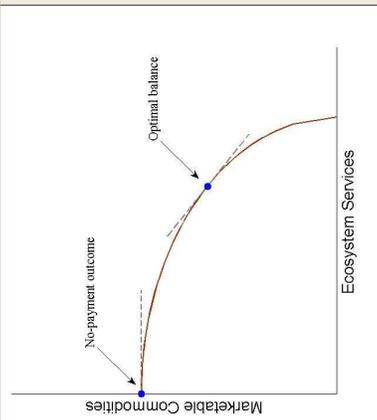
How Do Markets for Ecosystem Services Work?

If land owners were paid for providing ecosystem services, then they would likely provide more of them. Some government-sponsored programs (e.g. cap-and-trade under the Waxman-Markey bill) can provide such a market for ecosystem services.

- Under cap-and-trade, the capped industries are given an emissions limit (the "cap"; e.g. x tons of CO₂), and these emission allowances can be traded on a market.
- Uncapped industries can also reduce emissions, if they choose. In return, they would receive offset credits, which they can sell on the allowance market.

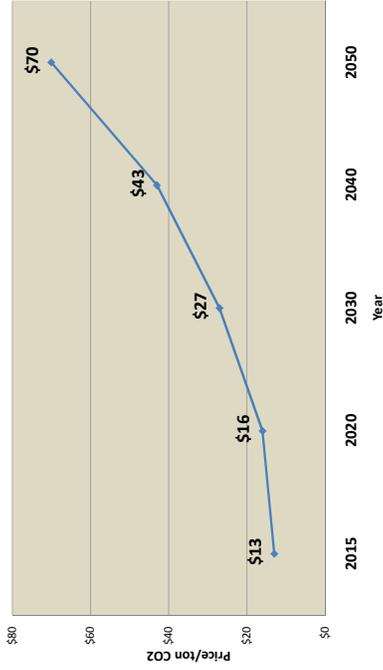
Projected allowance prices (see figure 2) are \$13 in 2015, rising to \$70 by 2050 (per ton of CO₂ equivalent). The projected size of the domestic offset market (see figure 3) is \$2.3 billion in 2015, rising to \$41.9 billion by 2050. Figure 4 presents some estimates of the carbon sequestration potential of various agricultural projects.

Tradeoffs Among Land Uses



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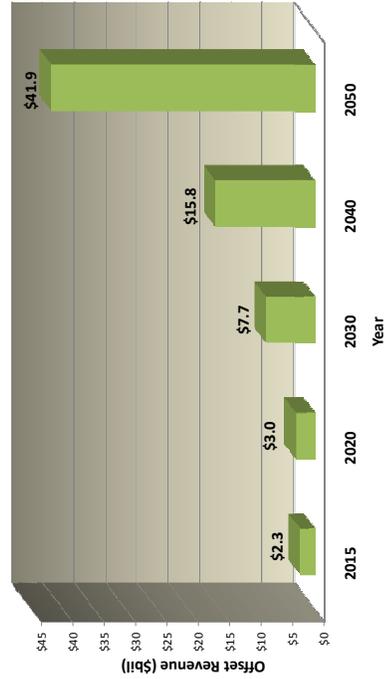
Projected Allowance Prices



Source: US EPA, June 2009, EPA Analysis of the American Clean Energy and Security Act of 2009 HR 2454 in the 111th Congress.

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Domestic Offset Market



Source: US EPA, June 2009, EPA Analysis of the American Clean Energy and Security Act of 2009 HR 2454 in the 111th Congress.

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Potential for Carbon Sequestration

Type of Project	Sequestration/Reduction Potential (Tons per year)
No-till soil management	0.5 - 0.75 per acre
Conservation/riparian buffer strips	1.5 - 6.5 per acre
Afforestation	0.25 - 0.75 per acre
Livestock methane reduction	5 per cow

Source: US EPA, 2006, Representative Carbon Sequestration Rates and Saturation Periods for Key Agricultural and Forestry Practices.

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Kentucky Farm Income Trends

Situation & Outlook 2009-10

Kentucky Farm Business Management

Net Farm Income (NFI) for farms participating in the Kentucky Farm Business Management (KFBM) program has been increasing over the last 10 years. NFI is the value of farm production less total operating expenses, plus gain or loss on machinery and buildings sold. It includes a return to the operator's labor, capital invested, and management.

Management Returns reflects the reward to owner/operators for decision making and risk taking. The operator's labor and interest that could have been earned on his/her capital invested in the farm are subtracted from NFI. Management Returns for KFBM farms follows NFI closely during the last 10 years. The opportunity cost of the operator's labor and investment have increased an average of six percent over the period.

Figure 1 shows NFI increasing nearly three-fold since 1999 to \$311,603. The straight line represents the overall upward trend. The graph shows significant dips in NFI during 2002 and 2005. Note that these farms experienced NFI below the trend in four years and above the trend in four years.

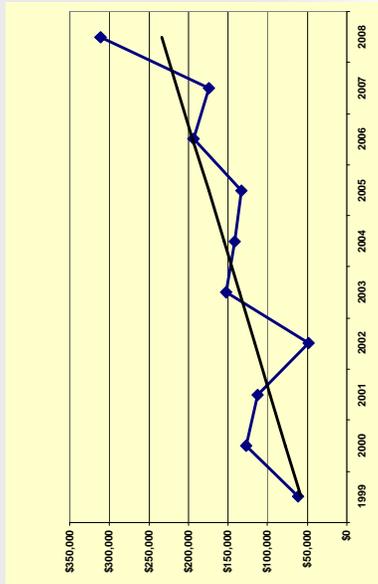
Figure 2 shows NFI for grain farms and livestock farms. While grain farms produce a higher return than livestock farms, the two lines are similar in ups and downs through 2005. In 2006 we begin to see two distinct Kentucky agricultures. Incomes on grain farms increased or stayed the same for the period 2006-2008. Livestock farms experienced a steady decline over the same three-year period.

A breakdown of livestock farms by type of livestock is illustrated in Figure 3. The hog farms shown here emerged from the late 1990's as larger and more profitable farms. Hog farm NFI began to fall a year before the other types of livestock farms. Increased hog placement, and thus supply, brought hog prices down before feed costs went up. Dairy farms experienced a three-year period of high profitability before feed costs increased and milk prices fell. The period of relatively high profits for beef cattle stretched from 2003 through 2007.

Management Returns for livestock farms generally follow NFI. The exception is for dairy farms. The opportunity cost of land and facilities rose faster than profitability. Note that beef cattle operations never covered all opportunity costs – never yielded returns to management - during this period.

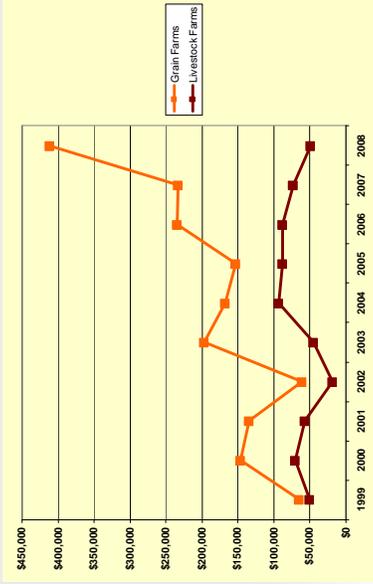
Finally, Figure 4 compares family living to NFI for the same 10-year period. Family living expenditures have increased an average of 7.6 percent each year to \$71,742 in 2008. Last year's record NFI likely influenced these farms to increase family living by 11 percent. Family spending in 2008 was more than NFI in six of the last ten years. Included in 2008 was a 71 percent increase in non-farm capital purchases.

Historical Data: Net Farm Income Kentucky Farm Business Management



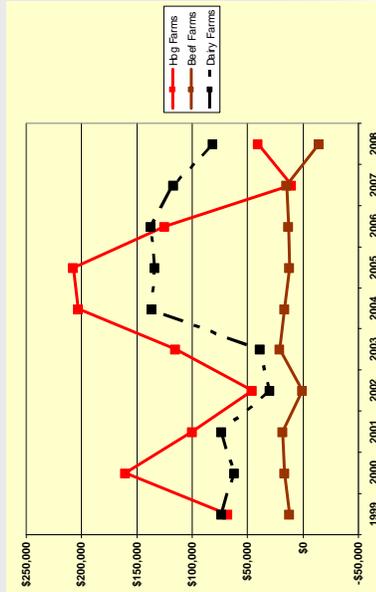
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NET FARM INCOME Grain vs Livestock Farms



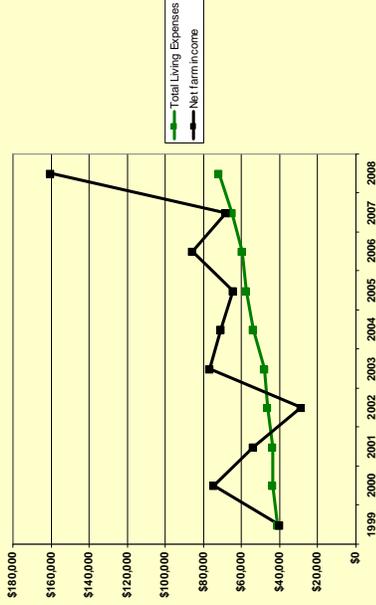
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NET FARM INCOME Livestock Farms



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TOTAL FAMILY LIVING & NET FARM INCOME



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