

The Kentucky Agricultural Economic Outlook for 2013

Edited by Kevin Heidemann and Miranda Hileman



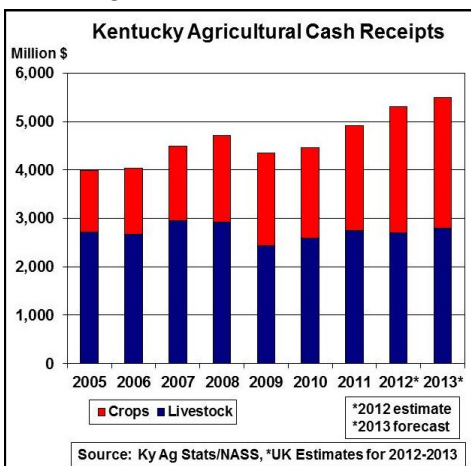
The U.S./Kentucky Farm Economy

Will Snell

2012 Review: The drought dominated the U.S./Kentucky farm economy conversation in 2012. Crop yields suffered greatly and high feed costs coupled with depleted pastures and water supplies adversely impacted livestock prices and profit margins. In the midst of one of the nation's worst droughts, USDA is expecting U.S. net farm income for 2012 to remain near record levels —\$114 billion, just 3% below than the previous record of \$118 billion in 2011, and 54% more than the previous ten year average.

Gross farm income increased due to modest increases in crop acreage and record level crop prices despite low crop yields. Consequently, national agricultural cash receipts are projected at record levels in 2012. Production expenses will be higher (due mainly to higher feed costs) and anticipated government payments (consisting primarily of direct payments and conservation payments) will remain relatively stable at approximately \$10.9 billion.

The other significant part of the net farm income equation will be crop insurance payments, which may total around \$20 billion for 2012. The biggest losers evolving from the 2012 drought will be livestock producers (especially dairy), feedlot operators, and crop farmers without insurance protection who experienced significant yield losses. Internationally, U.S. export value remained near record levels in 2012 since higher prices offset the adverse effects of lower export volume, a slight appreciation of the U.S. dollar, and weak global economic growth.



What about Kentucky? The Commonwealth is coming off a record year in terms of agricultural cash receipts—slightly below \$5 billion in 2011. The outlook entering 2012 was for receipts to expand further with continued strength in crop and livestock prices and livestock returns, coupled with increased crop acres. Severe weather conditions in the spring (freeze) and summer (drought/heat) adversely impacted the quantity and quality of most crops. Corn took the biggest hit. Kentucky yields were slashed in half, a much greater reduction than national corn yield losses.

Similar to national trends, higher feed costs and the slowing of the global and U.S. economies had a negative impact on Kentucky livestock prices, too. Despite yield reductions and livestock challenges, we estimate that Kentucky agricultural cash receipts will set another record level in 2012, exceeding \$5 billion for the first time in history. Preliminary USDA reports indicate Kentucky agricultural cash receipts for January-September 2012 totaled \$3.6 billion (10% above 2011's record level for the same period) primarily in response to carryover 2011 grain sold in 2012, strong spring cattle prices, and a good quality 2011 tobacco crop sold after Christmas. While cattle prices are off their spring 2012 highs, they will finish the year relatively high. A larger and higher-priced tobacco crop will enable tobacco receipts to increase this year. Despite significant yield losses, corn receipts for the calendar year will rival poultry as our top agricultural enterprise. Following a difficult period, the equine sector is showing signs of improvement. As a result, we are forecasting Kentucky agricultural cash receipts totaling \$5.3 billion for 2012. Kentucky's net farm income will be boosted by significant crop-insurance payments, which enable it to remain near the top end of our typical range (\$1 billion to \$1.5 billion), but well below our \$2.1 billion record high achieved in 2005 following the tobacco buyout.

2013 Outlook: After a challenging weather-related year, Kentucky farmers are hopeful for a better growing season. Crop price outlook will depend greatly on global production response to the relatively high-price incentives induced by tight world supplies, but price incentives for most crops will encourage addi-

tional cropland acres. Cattle prices and returns also will benefit from tight supplies. A rebounding of grain inventories could benefit dairy, poultry, beef, and hog returns by easing pressure on feed costs. Even though export volume has decreased, the value of agricultural exports is projected to increase to a record level in 2013 (\$143.5 billion) due to relatively high prices. Increasing demand for local foods and improving infrastructure will again allow local food market growth in 2013. Hopefully an improvement in the general economy and housing starts will boost timber and green (nursery and greenhouse) industry sales.

Collectively, relatively strong prices, increased crop acres, and global demand will enable Kentucky agricultural cash receipts to continue to grow in 2013 (\$5.4 billion to \$5.6 billion). Our main concern is what will happen when approximately 15% to 20% of our current net farm income disappears with the tobacco buyout payments ending in 2014 and the likely elimination of direct payments. Kentucky agriculture will have to make up those losses (approximately \$200 million) in the marketplace, which will put more pressure on growth in local food markets and expansion in exports.

Tobacco

Will Snell

2012 Burley Review: This past year has been the most interesting season for burley tobacco during the post-buyout era. Based on the world burley supply/demand balance entering 2012, it was apparent that tobacco companies were going to request that Kentucky burley farmers increase acreage. However, it was not clear how farmers would respond, given price/profit incentives from other agricultural enterprises, labor challenges, increasing demands from burley contracting companies, and long-term regulator uncertainty. Despite these factors, U.S./Kentucky farmers did plant 14% more acres in 2012. The drought certainly impacted the 2012 crop, but tobacco yielded fairly well given the extreme weather conditions. Furthermore, curing conditions led to one of the better quality crops in recent years. USDA estimates the 2012 U.S. burley crop will total 202 million pounds, 17% above the 2011 crop. Global burley production fell 25% in 2012, with much smaller crops in Africa and

South America. Given the tight world supply/demand balance, demand for high-quality burley will be exceptionally strong for the 2012-13 marketing season. In fact, market demand conditions prompted new buyers and led to revised (higher) contract prices in November. A combination of a favorable supply/demand balance, higher contract prices, and above-average quality has resulted in 2012 prices in the \$1.90s and even exceeding \$2.00/lb for top quality leaf compared to a \$1.75/lb 2011 average. U.S. burley disappearance (use) has stabilized around 210 million to 220 million pounds in recent years with fairly flat leaf exports and domestic use. Low U.S. burley supplies limited export opportunities in spite of favorable exchange rates. Domestic consumption continues to decline, but the rate of decline in U.S. cigarette consumption has decreased, which has supported domestic burley demand amidst tight world burley supplies. A larger overall (burley and dark) Kentucky tobacco crop (+11%) coupled with higher prices likely will generate a Kentucky tobacco value exceeding \$380 million for 2012, and may ultimately end up being the highest valued tobacco crop since the 2004 buyout.

2012 Dark Review: U.S. dark tobacco producers continued to benefit in 2012 from growing domestic snuff sales (increasing about 4% annually) as consumers respond to successful marketing efforts, new smokeless tobacco products, smoking restrictions, and the perceptions of lower health risks associated with smokeless products relative to cigarettes. On the supply side, dark tobacco acres have been adjusting the past few years in response to an excessive crop in 2008. According to USDA, U.S. dark fire-cured production was up 3% in 2012 (53.3 million lbs), but U.S. dark air-cured production fell 7% (14.9 million lbs). Kentucky produces around 60% of the nation's dark fire-cured tobacco and 80% of the dark air-cured output. Anticipated crop sizes are getting closer to consumption levels, which indicates that the industry is moving toward an ideal supply/demand balance. Prices should be close to, or slightly higher than, last year's average of \$2.56/lb for dark fire-cured and \$2.28/lb for dark air-cured.

2013 Outlook: In response to higher global prices and the depleted level of non-committed stocks, world burley production is expected to increase by more than 20% in 2013 as Africa and South America rebound. Due to supply uncertainties and anticipated needs, tobacco companies may offer contract volume increases for some U.S. burley growers in 2013. The response of U.S./Kentucky burley growers to other profitable opportunities is unclear given the concerns over labor and other regulations, dilapidating infrastructure, and increasing contract demands of tobacco com-

panies (i.e., GAP requirements). Expectations of larger global burley crops will constrain future price growth. The value of the U.S. dollar remains a critical issue in assessing future competitiveness and export expansion of U.S. burley in global markets. Domestic use will continue to decline in response to smoking restrictions, price hikes, and health concerns. The long-term outlook for U.S. burley hinges upon the global regulations on flavorings, which are a critical ingredient in blended cigarettes. However, other issues surrounding social responsibility (e.g. child labor laws), the environment, government regulations, and consumer health may favor U.S. burley growers if they can adjust quicker than their foreign competitors. Dark-tobacco prices and acreage should stay relatively constant in response to anticipated growth in smokeless sales amidst adequate supplies. If labor issues can be addressed, price incentives are provided, and a decent growing/curing season evolves, market conditions may enable the Kentucky tobacco industry to approach \$400 million in sales for the 2013 crop.

Grains

Cory Walters

2012 Review: We entered 2012 with lower ending stocks in the U.S. and world markets for corn, soybeans, and wheat. Average farm prices rose in response to fewer ending stocks. From the 2010-11 crop years to the 2011-12 crop years the price of corn increased by \$1.04 per bushel (+20%), the price of soybeans increased \$1.20 per bushel (+11%), and the price of wheat increased \$1.54 per bushel (+27%). Kentucky producers responded to higher prices through planted acreage: corn-planted acres increased by 20% to 1.65 million acres; soybean-planted acres decreased by 1% to 1.47 million acres; and wheat-planted acres increased by 7% to 580,000 acres.

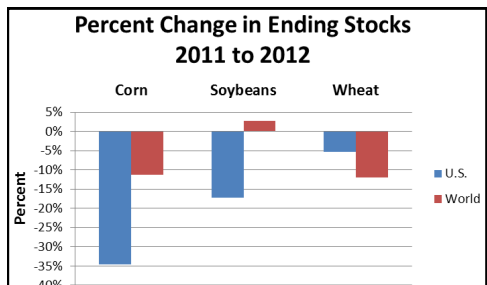
Weather conditions were extreme. In Kentucky, corn took the hardest hit with an average predicted yield of 68 bushels per acre, about 49% of trend yield. Soybeans were somewhat spared due to late summer rains, coming in around 37 bushels per acre, about 94% of trend yield. The wheat crop fared well due to good spring growing conditions, coming in at 62 bushels per acre, at 95% of trend yield.

Nationally, the November 2012 World Agricultural Supply & Demand Estimates (WASDE) report put the 2012 U.S. corn crop at 10.72 billion bushels, down 13% from the 2011 crop. Yield was hit hardest coming in at 122.3 bushels per acre (17% less than 2011). An additional five million planted acres (5.4 %) in 2012 helped keep production from going lower. High corn prices have caused users to look overseas for corn; imports are predicted to be up 245% over 2011 to 100 million bushels. High prices have also affected corn consumption. Total use is predicted to be down 1.3 billion bushels or

11% over last year to 11.17 billion bushels with reductions expected across all users of corn: feed and residual, down 9%; food seed and industrial, down 9%; and exports, down 25%. With less production than use, ending stocks are predicted to decrease 35% to 650 million bushels. Globally, corn ending stocks are down 11%.

U.S. soybean production is predicted to come in at 2.97 billion bushels, off 4% from 2011. U.S. producers planted 3% more acres in 2012, yet yields are predicted to be about 6% less. Soybean use is predicted to be at 3.02 billion bushels, about 4% less than 2011. Declines are expected across all uses: more than 8% in crushings, and more than 1% each in exports and seed. A smaller crop size than use implies a reduction in ending stocks. WASDE predicts a 17% reduction in U.S. soybean ending stocks. Globally, ending stock levels should rise slightly due to production losses in the U.S. being offset with larger gains in South American production.

U.S. wheat production in 2012 exceeded 2011 levels by more than 13%. Wheat use is predicted to increase by nearly 10% with increases predicted across all uses. Overall, U.S. ending stocks are predicted to drop a little more than 5%. Globally, ending stocks are expected to decrease by 12%, with the largest decreases coming from production issues from major exporters such as EU-27 and Australia.



2013 Outlook: We are entering another year with fewer ending stocks, especially for corn and soybeans. Prices have moved higher, which is providing incentive to produce more. As we move into winter and spring, corn and soybean prices will be sensitive to information pertaining to expected planted acreage. Moving into summer, corn and soybean prices will be sensitive to growing conditions, which will be independent from growing conditions experienced in 2012. A normal or better growing season coupled with increased planted acreage will put heavy downward pressure on prices. Alternatively, a poor growing season will result in a repeat of 2012 price action. Protecting expected revenue can be done through forward contracting and crop insurance. Forward contracting should be done incrementally on small percentages of expected production using decision dates and predetermined prices. The purchase of call options (to benefit from

significant increases in futures prices) over the critical portion of the growing season may be prudent on pre-sold bushels because it also can help alleviate apprehension toward using forward contracts. Crop insurance also should be purchased because it protects against not producing forward-contracted bushels. For the crop-insurance contract, a good starting point is a revenue-protection policy at a high coverage level with enterprise units and selecting trend adjustment, if available.

Livestock and Meats

Kenny Burdine and Lee Meyer

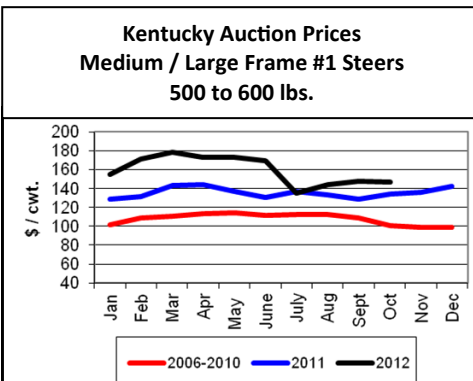
2012 Equine Review: After dropping drastically in 2009 and 2010, Kentucky equine receipts rallied considerably in 2011, reaching \$800 million. Receipts are still well off the one billion dollar levels reached in 2006-08, but this change was a welcomed improvement since the market had previously experienced weak sales. Sales were steady during 2012, but prices were generally improved. For example, Keeneland's September yearly sale gross was down around 2%, but average price was up by about 14%. Total receipts are likely to decrease slightly in 2012, but the equine market appears to be showing signs of improvement.

2013 Equine Outlook: Looking ahead, equine markets should continue to improve during 2013. Improved sale prices and steady stud fees are likely as the market continues to recover. Assuming that demand remains relatively strong, receipts are likely to improve in 2013.

2012 Cattle Review: The spring 2012 cattle market set records through May. This was largely due to tight supplies and excellent spring weather, pushing calf prices into the \$2 range; many summer backgrounders paid more than \$1,000 per head for stocker cattle. However, feeder cattle prices fell sharply through summer as dry conditions and summer heat took their toll on the corn crop, causing a surge in corn prices. Heavy feeders regained some ground by fall, but calves remained well below their spring highs. Fortunately, moisture conditions improved for much of the state during the fall, which resulted in improved hay supply and delayed hay feeding from mid-summer expectations.

2013 Cattle Outlook: Much like the last several years, tight supplies should provide solid underpinning for the 2013 feeder cattle market. Weather challenges and competition for ground have slowed much interest in expansion even with improved prices. Even if expansion were to begin in 2013, it would take until at least 2015 for larger calf crops to be seen. While wild cards such as grain prices and weather conditions exist, supply conditions couldn't look much better. Spring 2013 calf prices should reach levels similar to those of 2012. Prices likely will decline seasonally into

fall, but the fall 2013 market should be stronger than that of 2012. Overall, 2013 should be a good year for Kentucky cattle producers if weather is cooperative and grain prices stay within the range of expectations.



2012 Dairy Review: 2012 was another challenging year for dairy producers. Kentucky began the year with 75 million dairy cows in production, according to USDA's January estimate, which is a decrease of 2.5% from 2011. The U.S. All Milk price softened through spring and summer, sending April through July prices below \$17 per cwt. By year's end, production had slowed and prices had pulled back above \$20 per cwt. The 2012 U.S. All Milk Price will average around \$18 per cwt, which is down around \$2 per cwt from 2011. However, selling price is only one piece of the profit puzzle and dairy producers also have struggled in the face of rising feed costs.

2013 Dairy Outlook: Lower milk production levels are likely to keep prices relatively strong through the first half of 2013. However, year-over-year production increases are likely by the second half of 2013 and have the potential to put some downward pressure on milk prices in the third and fourth quarters. Overall, milk prices are still likely to average about \$2 per cwt higher in 2013.

2012 Hogs Review: Modest changes in pork production have been accompanied by significant changes in price over the past few years. 2012 production was up 2%. Prices for 2012 averaged about \$83 per cwt on a carcass weight basis (\$60 per cwt on a live-weight basis). This price is similar to 2011, but about 50% higher than the 2009 price. 2012 was a mixed year for profit because of the dramatic increase in feed costs. Trade continues to be a key market driver, with almost one-fourth of U.S. production going into export markets.

2013 Hog Outlook: Recent USDA Hog Inventory reports indicate a small, feed cost-driven decline in hog production for 2013. Pork production is expected to decline by 2% to 4% and per capita consumption will continue to decline to less than 45 pounds. With continued strong demand, both domestically and internationally,

prices should increase. The 2013 average price should be in the upper \$80s. Futures market contracts for the summer, normally the highest price season of the year, are trading for about \$100.

2012 Sheep and Goat Review: Lamb prices remain strong, but they are down 20% from the high levels of 2011. Lamb prices are difficult to standardize because of the large variety of types and weights on the market, but fall prices for 100 pound lambs in Kentucky were about \$1 per pound, compared to \$1.20 per pound in New Holland, Pa. Sheep numbers are rising in Kentucky after several years of decline. There are about 40,000 sheep in Kentucky, according to the USDA's most recent report, which is an increase of 18% compared to a 2% decline nationally. The goat market, unlike the lamb market, has remained at the high 2011 levels. New Holland prices are averaging about \$1.80 per pound for Selection 2, 60-80 pound kids. Similar goats at Kentucky graded markets sold for \$1.50 per pound. The national goat inventory is down about 4%, but Kentucky's inventory is down 6% from 2011. However, dairy goat numbers in Kentucky are up significantly to 7,000; which is a 24% increase even though the U.S. inventory was relatively dormant.

2013 Sheep and Goat Outlook: An expected 10% drop in 2013 production is likely to help strengthen the 2013 lamb market. However, since half of the lamb consumed in the United States is imported, trade impacts can have significant implications for the national lamb market. A large portion of Kentucky lamb is sold directly into the local market so prices are more stable. Goat prices are likely to remain at the high levels of 2012 because of a strengthening economy and declining production caused by a smaller national goat flock.

2012 Broiler Review: Broiler production declined slightly in 2012 after hitting a peak in 2011, while exports hit a new record high and accounted for more than 19% of production. Domestic consumption dropped to 80 lbs per person and prices rose by 6%. Breast meat and wing prices increased over 2011, but dark meat prices remained steady.

2013 Broiler Outlook: Similar to the entire livestock sector, feed prices are having an impact on broiler production levels. However, the impact will be minimal because production is likely to decline only 2%. Higher 2012 prices have partially offset increased feed costs, reducing the impact on overall production levels. The USDA predicts exports will remain at high levels, which will leave less than 80 pounds of chicken per person to the domestic market (the lowest levels in 10 years). Prices are likely to rise 5% to 10%, and average in the upper \$.80s for 2013.

Horticulture

Tim Woods

2012 Review: Ten years ago when Kentucky started to make a push toward diversification and development of the horticulture industry, the value of all horticulture farm cash receipts was \$78.6 million—produce (\$18.9 million) and floriculture, nursery, greenhouse, and sod (\$59.7 million). Kentucky's produce (vegetables/fruit) industry has seen steady growth over this period through a difficult economy; the green (nursery/greenhouse) industry felt a more negative impact during the slow recovery. Industry sales trends point toward 2012 gross sales amounting to \$110 million to \$120 million, slightly less than or equal to 2011.

Produce Industry: Gross produce receipts have steadily increased each year for the past decade as more producers have benefited from additional direct market channels, especially farmers' markets and auction sales. In 2011, we saw record produce sales for Kentucky, particularly with vegetables, but poor spring weather significantly impacted fruit in 2012. Producer numbers and acreage have continued to expand with relatively strong planting intentions for the next three years. Direct markets remain an important channel for most producers. Over 2,500 vendors sold at farmers' markets in 2012. Auction and other wholesale channels have significantly grown in number and scale as well as producer numbers with the sustained interest in local produce in Kentucky markets.

The most recent planting intentions data indicate a total of 13,000 acres of produce crops in Kentucky: Fruit-crop acreage was estimated at 3,000 acres, and vegetable-crop acreage was estimated at 10,000 acres. In 2002, Kentucky estimated 10,500 acres in all produce. While Kentucky remains a relatively minor produce supplier compared to surrounding states, the sales growth in Kentucky has significantly outpaced that of surrounding states, especially for fruit.

Green Industry: The green industry nationwide is driven by new home construction and healthy consumer spending, which have been in a deep and extended slow down for the past four years. Greenhouses, sod operations, landscapers and mid-size nursery businesses grew rapidly from 2002 to 2006, but have been struggling since. A weak economy and relatively high input costs, especially labor, resulted in another weak, though slightly improved, 2012 marketing season. Demand has remained subdued for most green products, particularly trees, shrubs, and sod.

2013 Outlook: Direct market, auction and independent grower-shipper wholesale sales will

likely increase. Produce demand will be strong. Of six active produce auctions in Kentucky, each is reporting strong growth in 2012. A number of important issues, however, will shape commercial fruit and vegetable production in Kentucky. A survey of horticulture Extension specialists in the Southeast pointed to labor management, food safety standards, and compliance as the top issues influencing production. These issues will remain the key industry drivers during the next few years. Gross sales will continue to be driven by higher-value direct marketing at farmers' markets, directly off the farm, and directly to foodservice. Wholesale opportunities will continue to expand as demand for local products remains strong in local markets. Overall produce acreage will continue to increase and higher-value market channels should see sales increasing over the next few years. The green industry should see a modest rebound in 2013 as the economy moves toward recovery, at least in terms of housing starts. Floriculture and service-oriented enterprises should see an earlier response to the recovery, followed by nursery and sod. While nursery firms are continuing fairly conservative business strategies, 35% indicated they were planning some capital improvements this year with a view toward future growth.

Forestry

Jeff Stringer, Bobby Ammerman,
Billy Thomas, and Alison Davis

2012 Review: A total of 596 million board feet of hardwood sawlogs and veneer were produced from Kentucky's forests in 2012. While this ranks the Commonwealth as the leading producer in the South and one of the top three in the United States, the output of hardwood saw and veneer logs is significantly below the recent high of 1.1 billion in 1999 and is reflective of national trends and the U.S. economic condition. The value of all delivered roundwood for 2012 is estimated at \$182.9 million dollars and reflects a reduction in cash receipts for woodland owners in 2012.

However, some timber products and species showed price increases or stability in 2012, including railway tie logs [delivered price \$293-\$332 per thousand board feet (MBF)]—hickory commanded the highest prices. Stave logs, predominately white oak, showed a significant improvement in pricing, rising to \$875 per MBF by the third quarter—the highest price in several years. In contrast, average prices for most sawlogs, including grade 1 logs for lumber production slipped 5% to 15% (including black walnut and white oak). Black cherry and red oak sawlogs were the fourth and fifth most valuable, prices remaining low and stable. In contrast, ash sawlogs declined and reached

recent lows in 2012. Soft maples and yellow-poplar were stable but low throughout 2012.

In 2012, the forestry sector provided \$6.357 billion in direct contributions and was responsible for a total of \$9.992 billion to Kentucky's economy. This contribution includes 708 wood industry facilities and 2.7% of Kentucky's jobs. The forestry sector continued contracting in 2012, losing an estimated 3.6%. Paper industries were affected the most (-4.7%). Housing directly affects Kentucky's forestry sector and soft housing starts in 2011 and 2012 precluded increases in many forestry sub-sectors. However, exports were relatively stable with \$131.5 million shipped during the first three quarters of 2012, led by wooden barrels (\$47.4 million), followed by hardwood pulp, oak lumber, and railway ties (\$15.2, \$13.9, and \$9.3 million respectively). The majority were shipped to Europe (36%), other North American countries outside of the U.S. (32%), and Asia (26%).

2013 Outlook: The outlook for 2013 will be mixed with hardwood lumber production and associated industries predicted to halt declines witnessed over the last several years. Modest increases in housing starts may forecast an eventual uptick in hardwood lumber production in 2013. However, an increase in employment is not expected as many wood industries are under-utilizing their workforce. Timber owners may benefit especially as industry predicts a tightening of log supplies, indicating a seller's market. Forest certification—available for family forest owners with an interest in managing their woodlands—may have improved markets for timber in 2013. If fuel prices and relatively low timber pricing continues in 2013, the logging industry will continue under duress and harvesting capacity will continue to decrease. A projected 4% decrease in printing and writing paper consumption in the U.S. indicates continued losses in Kentucky's paper-related industries. The presence of insect and disease problems will continue to be watched and may influence markets for affected species. Economic conditions resulting in budget cuts for the Kentucky Division of Forestry are an immediate concern. It is critical that Kentucky's capacity to assist woodland owners in certification and other emerging markets, and provide for long-term sustainability of forests and timber resources, not be diminished.

