2012 Georgia Ag Forecast
Introduction

From production to processing, Georgia agriculture is the single largest industry in the state. As an industry, it supports the state with jobs, food and fiber and adds numerous other benefits that stretch far beyond our corner of the country. Agriculture is Georgia, and we at the University of Georgia College of Agricultural and Environmental Sciences are doing everything we can to support both.

Despite economic doubt in the form of budget cuts, our extension programs are doing more with less as they continue to evolve to serve agriculture and agribusinesses across the state, and our faculty have taken on more responsibilities in order to deliver the information and research you can use to better your businesses.

High prices and record-setting exports for food and agricultural products have set the stage for Georgia agriculture to be an economic star. We expect to see the farm economy remain robust and help stabilize the state as the rest of the economy pulls slowly out of the recession.

While the industry is strong, its resilience will be tested this year as it overcomes difficult obstacles. Most notably will be the challenge of the recent immigration laws and its impact on farm labor.

With this in mind, we present the sixth annual Ag Forecast publication. The material presented here represents the best thinking of our faculty who work with the various agribusiness industries in our state. This year we have added a special section on farm labor to address this hot topic issue.

Whether you’re interested in the financial outlook of the U.S. and Georgia, in crops, livestock, biofuels, agritourism or locally grown food, we’ll show you the facts of 2011 and discuss both the uncertainty and potential that 2012 holds.

We thank our primary sponsor, Georgia Farm Bureau, and our contributors, the Georgia Agribusiness Council and the Georgia Department of Agriculture, for providing the support that allows us to extend research-based information from the University of Georgia to our state’s citizens. This is our job now just as it was when UGA and other land-grant universities were founded more than 150 years ago.

We also thank you for your participation.

J. Scott Angle  
Dean and Director  
University of Georgia College of Agricultural & Environmental Sciences

Kent Wolfe  
Director, Center for Agribusiness & Economic Development

Octavio A. Ramirez  
Department Head, Department of Agricultural & Applied Economics
## FINANCIAL OUTLOOK

### U.S. and Georgia
Dr. Jeffrey M. Humphreys

### Georgia Farms
Dr. Cesar L. Escalante

## INPUTS

### Inputs and Production Expenditures
Dr. Forrest Stegelin

## CROPS

### Row Crop Net Returns
Amanda Smith, Dr. Nathan B. Smith and Dr. Don Shurley

### Peanuts
Dr. Nathan B. Smith

### Grains and Soybeans
Dr. Nathan B. Smith

### Cotton
Dr. Don Shurley

### Vegetables
Dr. Esendugue Greg Fonsah

### Fruit and Nuts
Dr. Esendugue Greg Fonsah

### Environmental Horticulture
Dr. Forrest Stegelin

## ANIMALS

### Beef
Dr. R. Curt Lacy

### Pork
Dr. R. Curt Lacy

### Dairy
Dr. Tommie Shepherd

### Poultry
Dr. John C. McKissick

## EMERGING

### Biofuels
Dr. George A. Shumaker and Audrey Luke-Morgan

### Value-Added Agribusiness
Dr. Kent Wolfe and Sharon P. Kane

### Agritourism
Dr. Kent Wolfe

### Locally Grown, Organic and Natural Foods
Dr. Tommie Shepherd and Julia Gaskin

## FEATURE

### Labor Situation and Outlook: Fruits and Vegetables
Dr. Esendugue Greg Fonsah

### Georgia’s Farm Labor
Dr. Forrest Stegelin and Dr. Cesar L. Escalante
U.S. and Georgia

Dr. Jeffrey M. Humphreys (jhumphre@uga.edu), Selig Center for Economic Growth, UGA Terry College of Business

The baseline U.S. economic forecast indicates that the economic recovery that began in the second half of 2009 will be sustained, but the rate of 2012 GDP growth will be very low (1.9 percent) and the risk of a recession will be very high (40 percent). With the year-over-year rate of U.S. GDP growth remaining below 2 percent for an extended period of time, the economic recovery will be vulnerable to economic shocks and/or policy mistakes.

Private, final demand rather than fiscal stimulus will be the primary driver of U.S. GDP growth in 2012. The federal government sector will subtract from rather than add to GDP growth. Growth will not be vibrant because we are going to continue to see restraint in spending by U.S. consumers, whom will remain very cautious.

GDP growth of many of our major trading partners will slow in 2012. It is almost certain that the EU will be in recession, which will reduce the rate of growth of U.S. exports and cut into overseas profits earned by U.S. corporations. The pace of import growth, however, will decline even more sharply than the pace of export growth. Additionally, spending on business structures will subtract slightly from real GDP growth in 2012.

On an annual average basis inflation-adjusted GDP will expand by 1.9 percent, which is far below the long-term trend rate of growth of approximately 2.6 percent. Since the setbacks in U.S. GDP that occurred in 2008 and 2009 were quite large—a peak to trough decline of 5 percent—and the rate of growth has not been very high, it will be at least 2016 before the labor market replaces the 8.8 million jobs lost during the period leading up to, and during and in the immediate wake of the recession.

As of mid-2011, only 20 percent of the jobs that were lost had been replaced. Full recovery of the jobs lost to the “Great Recession” by 2016 assumes that another recession is avoided in the interim, which is a heroic assumption.

Although many forces will power U.S. GDP growth in 2012, there will also be some powerful headwinds: (1) Consumers will exercise restraint due to deleveraging, the lagged effects of massive wealth losses, difficult labor market conditions, volatility in the financial markets and low expectations regarding their current and future economic situations; (2) policy gridlock regarding the budget situation in Washington, D.C., will undermine confidence and exert fiscal drag on the economy; (3) government efforts to re-regulate certain industries, or to protect at-risk economic sectors, will have the unintended consequence of reducing the potential for growth; (4) spending by many state and local governments will continue to drop; (5) tight credit will not be loosened; and (6) spending on nonresidential construction will decrease through mid-2012.

Despite ample liquidity, the U.S. banking system is still not completely fixed. We will continue to feel the aftershocks of the financial panic that seized up the credit markets in September 2008. Plus, Europe’s banking and sovereign wealth problems are far from having been resolved, which could precipitate a full-blown global financial crisis. Meanwhile, due to disappointing revenue collections and depleted reserves, many state and local governments will continue to reduce spending, creating substantial fiscal drag.

Housing

The prolonged free fall in single-family homebuilding is over, but the underlying demand for housing remains weak despite record low mortgage rates and substantially reduced home prices. In 2012 the number of single-family housing starts for new construction will increase by about 5 percent and contribute to U.S. GDP growth for the first time since 2005. The small gain in single-family housing starts will pale in comparison to the peak-to-trough plunge in activity that occurred in 2008 and 2009, but even a small upturn will be a positive development.

The huge inventory of unsold homes will keep a lid on home price appreciation for several more years. Shadow inventory will be a huge problem, especially in foreclosure-ridden markets. In 2012, home price depreciation will be very spotty and mostly reflect a higher proportion of distressed sales. In most markets, as home price depreciation gives way to price stability, potential homebuyers who have been waiting on the sidelines for even lower prices will gradually overcome their fears and opt to become homeowners; rising rents will reinforce this trend.

Multi-unit residential construction will contribute more to GDP growth in 2012 than the single-family subsector. Therefore, residential construction will add slightly to, rather than subtract from, U.S. GDP growth. That is noteworthy given that residential construction subtracted 1.1 percent from U.S. GDP growth in 2007, 1.1 percent in 2008, 0.7 percent in 2009, 0.1 percent in 2010 and 0.1 percent in 2011.

<table>
<thead>
<tr>
<th>United States Baseline Forecast 2011-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
</tr>
<tr>
<td>Gross Domestic Product, Bill of 2005$</td>
</tr>
<tr>
<td>Percent Change</td>
</tr>
<tr>
<td>Nonfarm Employment (mil.)</td>
</tr>
<tr>
<td>Percent Change</td>
</tr>
<tr>
<td>Personal Income, Bill of 2005$</td>
</tr>
<tr>
<td>Percent Change</td>
</tr>
<tr>
<td>Personal Income, Bill of $</td>
</tr>
<tr>
<td>Percent Change</td>
</tr>
<tr>
<td>Civilian Unemployment Rate (%)</td>
</tr>
<tr>
<td>CPI-U Annual-Percent Change</td>
</tr>
</tbody>
</table>

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia.
Consumer Spending

Consumers’ inflation-adjusted contribution to GDP growth will be positive, but not as much in 2012 as it was in 2011. Consumers’ tightfisted attitudes partially explain the contribution to GDP growth from consumer spending.

In the second half of 2011, financial market volatility as well as concerns stemming from the debacle surrounding the increase in the nation's debt limit caused consumers’ confidence to plunge to levels unseen since the 1950s. Fundamentally, consumers’ frugality reflects the lagged impacts of a broad-based deterioration in household finances stemming from multiple causes including heavy job losses, the protracted housing recession, capital losses in equities and real estate, the credit crunch, high debt levels and limited household savings. Going forward, the ongoing deleveraging process, which is already quite advanced, will be gradual rather than abrupt. Therefore the savings rate will gradually rise.

Labor Markets

On an annual average basis, total nonfarm employment will increase by 1 percent in 2012, which will be only slightly higher than the 0.8 percent gain estimated for 2011. Companies will increase hires as domestic demand for goods and services recovers, but progress will be limited because demand will increase slowly. Other professional and business services companies will post the fastest rate of employment growth followed by transportation and warehousing. Wholesalers, education, health services, the arts, entertainment, recreation and information subsectors will also see solid employment gains. Construction, government and information jobs, however, will be on the decline rather than on the rise.

Business Spending

Year-over-year percentage increases in business spending for equipment and software will grow three times faster than the GDP through 2012, reflecting the broadening of the economic recovery to include more economic subsectors, strong cash flows and high corporate profits.

Corporate discipline with respect to capital outlays throughout 2010 and 2011 was excellent. Consequently, lending standards will continue to ease—albeit not very dramatically—in 2012. For many companies, cash flows will be adequate relative to the amount of funds they need for investment, lessening the impact of lingering credit constraints.

Less positively, capacity utilization will be a mild—yet weakening—headwind for business spending for equipment and software. Much of the excess capacity is either in the wrong location or in the wrong industry. The rate of capacity utilization in all industries was 77 percent in mid-2011, which is up from 75 percent in mid-2010. The long-run (1972-2010) average rate of capacity utilization for all industries in the U.S. is 80 percent.

Capacity utilization varies dramatically by industry. In mid-2011 capacity utilization for industries producing crude products was 89 percent, which is above its long-run average and therefore should spur capacity additions. In contrast, capacity utilization for goods at the primary and semi-finished stages of production was 75 percent, a rate 6 percentage points below its long-run average.

International Trade

U.S. export growth will be very broadly based in 2012, and growth will increasingly be in emerging-market or commodity-based economies rather than in developed economies. Exports of goods will grow much faster than exports of services. Growth will be especially fast-paced for capital goods. Emerging-market countries in particular are expected to spend heavily on equipment and infrastructure. However, U.S. dollar depreciation will not boost U.S. exports dramatically in 2012.

Inflation

If oil prices remain relatively steady, consumer price inflation will increase by 2 percent in 2012, compared to 3 percent in 2011. Of course, inflation will be even lower should energy prices tumble or should the economy experience a back to back recession. There are no signs that inflation is or will soon be a problem, and the usual drivers of inflation will be less intense in 2012 than in 2011. For example, the pace of 2012 GDP growth will be well below average, and consumer spending and employment will both grow very slowly.

The outlook for inflation beyond 2013 is considerably less sanguine, however. The magnitude of recent fiscal and monetary stimuli increases the risk of inflation. The federal debt is skyrocketing in absolute terms as well as in terms of its percentage of GDP. Despite the lack of a good substitute, the U.S. dollar could gradually lose some of its status as a reserve currency or safe haven. China and others with large foreign currency holdings may choose to gradually diversify their portfolios away from U.S. dollar assets.

Georgia Outlook

The 2012 forecast calls for Georgia’s inflation adjusted GDP to increase by 1.5 percent (annual average basis), which represents an improvement over the 1 percent increase estimated for 2011. The annual percentage gain in the state’s GDP for 2012, however, will fall short of the 1.9 percent gain estimated for the nation’s GDP. The state’s nominal personal income will grow by 3 percent in 2012, which is below the 4.2 percent gain estimated for 2011. Although nonfarm employment will only rise by 0.5 percent, the small upturn is still noteworthy because it will be the first gain since 2007. In contrast, the nation posted positive job growth in both 2010 and 2011 and will see the number of jobs rise by 1 percent in 2012, a rate double what is expected for Georgia.

The state’s unemployment rate for the year as a whole will average 10.1 percent, or about 0.2 percent lower than the 10.3
percent rate estimated for 2011. Job growth will be slightly better balanced in 2012 than either in 2010 or 2011, but it will still be quite weak. Georgia’s job growth will follow the national trend in 2012. By midyear the information industry will be hiring for the first time in a decade. The overall pace of job creation will not accelerate considerably until the construction and financial activities employment sectors begin to recover in 2013. That is when Georgia’s economy will finally catch up with the national economy in terms of job growth. Government employment, however, will decline for several additional years and will be the strongest remaining headwind.

Georgia’s economy will underperform the nation’s economy because of the state’s recent heavy dependence on real estate development, homebuilding and other closely allied industries such as building materials manufacturing. Prior to the housing bust, Georgia—like many other Sunbelt states—had become very dependent on the in-migration of new residents and businesses to beget yet another round of new development that was based, in part, on servicing the previous round of new development.

The financial crisis and the bursting of the housing bubble caused the inflows of people and businesses to end abruptly. The sudden drought of new construction and the lack of new residents precipitated a large and extremely painful restructuring of Georgia’s economy. The restructuring process has been extremely drawn out due to the weakness of the national and global economies.

As of mid-2011 two out of five of Georgia’s construction jobs are gone. Much of the manufacturing base that was geared to new construction is also gone. The financial crisis and the real estate bust did more damage to Georgia’s financial activities sector than to the nation’s financial sector. For example, by mid-2011, statewide employment in financial activities was 17 percent below its cyclical peak level compared to a drop of only 9 percent for the nation.

The outsized job losses in financial activities reflect overexposure to construction, land development and commercial real estate loans, which caused Georgia to lead the nation in the number of failed banks. Georgia still has an elevated number of troubled institutions, which means more bank failures lie ahead. Therefore job losses in financial activities will persist throughout 2012.

Georgia also suffered from restructuring in areas unrelated to the bursting of the property bubble. For example, the state’s information industry, which is heavily concentrated in Atlanta, began restructuring and losing jobs back in 2001 when the technology bubble burst. As of mid-2011, it appears that this massive private-sector restructuring process has nearly run its course. Therefore, Georgia’s economy will face diminishing structural headwind in 2012, and its performance will begin to more closely match that of the nation’s economic performance.

In 2011 the rates of growth of Georgia and U.S. GDP converged dramatically—by 110 basis points. Although Georgia’s economy will underperform the U.S. economy again in 2012, the differential in the rates of GDP growth will shrink to only 40 basis points, or 0.4 percent. Full convergence in the rates of U.S. and Georgia GDP growth is expected in 2013.

The last remaining large imbalance, or bubble, is hard to miss—government spending. Even as the restructuring in Georgia’s private sector nears completion, much restructuring lies ahead for the public sector. However, Georgia is better positioned than the vast majority of states. For example, in Georgia, per capital state and local government tax burdens are lower than they were 20 years ago and are also low relative to other states.

Additionally, Georgia is not overly dependent on federal spending. In ordinary times (1985–2005) Georgia received about $1 in federal spending for each $1 Georgia paid in federal taxes. Georgia ranks 32nd among the states in terms of federal spending received per dollar of tax paid. Therefore, Georgia’s competitiveness probably will not suffer from the federal budget cuts that are looming. However, areas of Georgia that are heavily dependent on federal government employment, transfer payments or contracts will be more exposed to the restructuring of the federal government sector. For example, federal spending cuts skewed towards domestic military bases could brutally hit Georgians.

Many of the positive forces underlying the forecast for the continuing recoveries of both the Georgia and U.S. economies are the same: spending for equipment and software will continue to rapidly increase; the global economy will continue to expand at a moderate pace; the dollar will be weak; and housing activity will be on the increase. As a result, prospects for Georgia’s logistics-centered economy and export-oriented businesses will be boosted. But even if a recession is avoided, Georgia will still face the same powerful headwinds the nation will.

Population growth will still be a driver of the state’s GDP, but it will not be as powerful as it has been in the past. A combination of cuts in federal entitlement programs for retirees, smaller private-sector pensions and still weak housing markets will cause significantly larger proportions of retirees
to retire where they already live rather than to relocate to Sun Belt states. Experienced workers who are homeowners will also be less mobile than they were in recent decades. In contrast, young people will be more mobile than ever before because they will be less likely to become homeowners and their costs of picking up and moving to take advantage of opportunities elsewhere will be quite low.

In 2012 Georgia’s population will grow at a pace that barely exceeds the national average—1.2 percent for Georgia versus 0.9 percent for the U.S. The differential in the annual rates of the state’s and the nation’s population growth will not widen substantially until Georgia begins to generate jobs at a pace that is significantly above the national average.

Many of the large relocation and expansion projects announced by the Georgia Department of Economic Development will provide a tailwind to Georgia’s economic growth. Georgia remains very competitive when it comes to landing many types of major economic development projects due to cost, logistics and tax advantages.

However, this advantage will not bear much fruit in 2012 because too few businesses have enough confidence in the economic situation to pull the trigger on expansion or relocation plans. Plus, housing markets are so weak that businesses are concerned about the costs involved in relocating their incumbent employees. Growth, therefore, will depend primarily on the expansion of existing industries or new business formation rather than corporate relocations.

Personal income growth will exceed the rate of inflation by only 1.2 percent in 2012. Therefore, consumers should have just enough income to sustain economic growth, but not enough to significantly accelerate the rate of state GDP growth. Should consumers choose to save more and spend less of their current income the economy will lapse into recession.

40% Risk of Recession
A full-blown financial crisis fueled by the government debt crisis in Europe constitutes the biggest risk to economic growth. The possibility of contagion from the European financial markets to the U.S. financial markets is quite high. A resurgence of political turmoil in the Middle East and Northern Africa is also a credible risk to growth because it could lead to oil supply interruptions and substantially higher oil prices. The U.S. and Georgia economies are growing too slowly to absorb a major oil price shock without tipping into recession.

A second energy crunch, one stemming from major supply interruptions rather than robust demand growth, would terminate the recovery and temporarily push up core inflation. Georgia would be particularly vulnerable to an oil price shock due to its large transportation, distribution and logistics industry as well as long commutes in the metro Atlanta area.

Historically, policy mistakes rather than negative external shocks are the primary causes of back-to-back or double-dip recessions. Given the political climate, there is a considerable risk that U.S. fiscal policy will be tightened too aggressively. Moreover, in this election year, political concerns might cause the Federal Reserve to act too slowly, or otherwise limit its policy options due to political rather than economic considerations. Low confidence alone could cause job growth and the recovery to fizzle out. In the second half of 2011, consumer confidence was already in recession territory.

The U.S. federal fiscal situation has worsened dramatically over the last several years, offsetting much of the beneficial—albeit painful—deleveraging that has occurred in the private sector. Also, little progress has been made towards reducing imbalances associated with fiscal deficits in several European countries. High debt-to-GDP ratios will severely limit fiscal policy options in many developed economies and could easily lead to substantial tightening of fiscal policy.

Another credit crisis, would lead to further collapse of equities. Tighter credit and even more wealth destruction would produce additional pullbacks by consumers and businesses. Accelerated deleveraging by consumers, would intensify the downturn. As credit gets even scarcer and corporate profits dive, even long-term capital spending projects would be scaled back. Foreign economic growth would also be much lower. Since the shocks themselves would be deflationary, the Federal Reserve would ease, but it has already aggressively and unconventionally eased. Another massive federal fiscal stimulus probably would not be forthcoming, and even if it did, it would take some time to gain traction.

For the U.S. and Georgia, a recession in 2012 would probably be much milder and much shorter than the Great Recession, but the intensity and duration of the recession would vary dramatically depending on the nature of the shock or policy mistake. The argument for a mild and short recession hinges on the fact that the main imbalances in the private sector that led to the Great Recession have either been fully or substantially corrected. For example, housing sheets have partially corrected. Although a back-to-back recession is not the most likely outcome, the odds of a double-dip recession are uncomfortably high. ■
The general economic mood remains bleak in 2012 as analysts forecast several more months of anemic growth before the U.S. economy experiences recovery. Recovery efforts were recently derailed once again by factors such as: the Standard and Poor’s historic downgrading of the nation’s credit rating, the ensuing European debt crisis, low rates of resource utilization and persistently high unemployment rates. As a result, the U.S. farm economy expects to post just a modest growth rate in 2011—a trend that will probably carry through onto 2012.

The U.S. Department of Agriculture reported mixed trends in 2011 farmland values across the county. While the national average farmland value increased by 6.8 percent from its 2010 value of $2,200 per acre, some states in the West and the Southeast, including Georgia, registered declining values for 2011. According to the USDA National Agricultural Statistics Service, Georgia’s average farmland value dropped to $3,800 in 2011, which is equivalent to an annual decline rate of 2.6 percent.

Figure 1 clarifies that the overall decline in aggregate farmland values in Georgia can be attributed to the low estimated value of pasturelands, which has been declining since 2008 (and experiencing wider swings in values relative to trends in national values), even as croplands registered a slight improvement in 2011 over their 2010 level.

As in 2010, 2011 saw a reverse growth pattern registered by cropland rents in Georgia, which increased by 8.13 percent over the yearlong period (see figure 1). In contrast, pasture rents dropped by 4.17 percent during the same period. Interestingly, pasture rents have declined by about 4 percent annually during the last two years. Once again, the driving forces that could positively influence farmland values and rents, such as favorable commodity-price prospects, could not offset the effects of depressed real estate market conditions. Such effects were more pervasive in estimated farmland value. As a result, farmland values have declined even as cash rents, especially for cropland, have steadily increased over the past several years.

The lending industry has seen good news; there have been lower incidences of bank failures in 2011. As of October 2011 the number of failures was at 84 banks after registering a record high (since 1992) of 157 bank insolvencies in 2010. Georgia and Florida, however, remain the hardest-hit states with 22 and 12 banks, respectively, closing in 2010 (Federal Deposit Insurance Corporation). Notably, only three agricultural banks have closed as of the second quarter of 2011. Agricultural banks in the Southeast have shown improving liquidity conditions as their loan-deposit ratios are back to their pre-recession levels, as is the rest of the agricultural banking industry (see figure 2).

Other indicators of the agricultural banks’ improving financial health are lower delinquency or borrowing risks—the most recent net charge-off rate dropping to 0.2 percent from a high of 0.8 percent in 2009—and increasing profitability—the updated return on equity improving to 4.5 percent after a record low of 1.8 percent in 2009 (Agricultural Finance Databook, Federal Reserve Board).
These encouraging signs are expected to linger through the 2012 year as banks seem to have already devised operating strategies to deal with and recover from bad debts accumulated during the height of the recession. Agricultural lenders are expected to continue to be cautious, strict and selective in their loan approval decisions, especially as projections indicate probable increases in short-term farm lending as more working capital funds will be needed to accommodate the rising input prices.

Interest rates will remain low in 2012 since the Federal Reserve’s Open Market Committee set the federal funds rate at a rock-bottom level as a tool for igniting growth in a sluggish economy in 2011. The committee actually expressed its intention to keep short-term interest rates at such low levels until mid-2013, as they do not foresee any significant economic growth realized in the short-term.

Meanwhile, the Federal Reserve also launched attempts to push down interests on mortgage and other long-term loans by rolling over maturing short-term bond purchases and purchasing long-term bonds. Therefore, farm lending rates will continue to remain at low levels.

As of the third quarter of 2011, weighted agricultural lending rates for the Southeastern region stood at 4.34 percent compared to 6.1 percent calculated for the first quarter of 2010. Overall, farm lending rates have been trending downhill for both the Southeastern region and the entire country since the prerecession period. The rates may either remain stable at these low levels or continue downwards until the economy experiences significant economic recovery that would warrant a reversal of the trend to curb probable inflationary pressures.

Figure 2. Quarterly National and Regional Loan-Deposit Ratios (LDR) and Average Lending Rates (INT) of Agricultural Banks, 2005-2011

Source: Agricultural Finance Databook, Federal Reserve Board.
After falling 4 percent in 2009 and rebounding a relatively modest 1.6 percent in 2010, total production expenses are set to jump 11.4 percent for 2011. This jump resembles the large increases in production expenses experienced in 2007 and 2008. Despite the increase, 2011 expenses remain slightly below those in 1979 when adjusted for inflation. On the price side, total expenses are affected by an expected 10 percent increase in the PITW (Production Items, Interest, Taxes and Wage rate) prices paid index. On the quantity side, total output (and quantity of inputs used) is predicted to decrease by 2.3 percent for crops and 1 percent for livestock. As a result total output will be down 1.1 percent. Despite the expected increase in expenses, total expenses as a percent of gross farm income is expected to be 3 percent lower than in 2010, at 75 percent.

Every expense category rose in 2011 including labor, feed, livestock and poultry purchases, fertilizer and lime, fuels and oils, seeds, interest expenses, repairs and maintenance, farmland rental costs and miscellaneous expenses. Since the value of crop production is expected to increase more than the value of livestock production, the rise in livestock-related expenses will impinge on net incomes of livestock farms more than crop farms in 2011.

The variable costs of producing crops in Georgia, including fruits and vegetables, will climb another 15 to 20 percent in 2012, with volatile fertilizer and seed prices being the primary drivers of increasing costs. Changing input prices have been the principal driver of crop-related expenses for the past decade. Acres planted to principal crops have not been a factor in the long-term growth in these expenses as farmers have switched enterprises on arable land rather than adding new land to production. However, 2012 will be different. Use of pesticides and more expensive seeds with increasingly complex genetic traits have increased and will continue to do so, stimulating demand and prices from higher acreages. Seed prices have risen 75 percent in the last five years, and seed expenses have increased 45 percent in the same time frame.

Increases in the price of natural gas have contributed to the rise in fertilizer prices. Yearly fertilizer prices from USDA show a price collapse in 2010, followed by sharp rebounds in 2011 and continued upward price pressures to the record price levels observed in 2008 for anhydrous ammonia, urea and diammonium phosphate (DAP) and 2009 for potash. A large share of fertilizer is imported (55 percent of nitrogen and 80 percent of potash); with phosphate being an exception as the U.S. is the lead producer (90 percent of world production). Heightened planting intentions for 2012 offer little relief in fertilizer prices based on supply and demand and supply analysis.

Energy industry analysts forecast a 2012 production season average price of $2.45 per gallon for West Texas Intermediate crude oil, which converts to a $3.95 per gallon retail diesel fuel price—a standard $1.50 per gallon price difference. Looking at the seasonality of fuel prices (cents relative to January prices), diesel fuel prices peak in October following a dip in July from late spring prices, and gasoline prices resemble a bell shape throughout the year, peaking in June. Agricultural labor has been confounded by the immigration reform discussion. Georgia’s unemployment rate is still hovering at the double-digit level; however, these figures do not include labor for agriculture, fisheries and forestry occupations. Nonetheless, farm laborer availability has become a policy issue and is reminiscent of the recession of the early 1980s, comparable in length but on the heels of the 1974 recession, when unemployment peaked at 10.8 percent nationally. The price trends of individual pesticides show that after the peak in pesticide expenses in 2008-2009, pesticide prices have been relatively stable (2,4-D herbicide and sethoxydim [Poast] herbicide) to a slight increase for selected pesticides (terbufos [Counter] insecticide) but declines in prices for others (chlorothalonil [Braw] insecticide and glyphosate [Roundup] herbicide). Pesticide prices in 2012 will again vary by pesticide, but expect an upward trend.

Farm equipment prices are anticipated to rise as well. Manufacturers realize that high commodity prices at harvest mean more money in farmers’ pockets, whom may still have pent up demand for new or nearly new farm equipment and machinery, so per unit sales should increase. Combine and cotton picker and tractor prices were up 7-9 percent in 2011. Expect that trend to continue, with sales spurred by increasing acreages and relatively high commodity prices.
Row Crop Net Returns

Amanda Smith (aziehl@uga.edu), Dr. Nathan B. Smith (nathans@uga.edu) and Dr. Don Shurley (donshur@uga.edu), CAES Department of Agricultural and Applied Economics

As of November 2011, commodity prices for the major row crops grown in Georgia are mixed from the same time last year. Peanut prices are up due to tight supplies from fewer acres planted during this recent crop year and the current drought across the Southeast. Corn prices are also up because of sustained demand and forecasted short supplies. Cotton prices are beginning to soften from futures-market highs in early 2011. Soybean and wheat prices are also down from 2011. From an input standpoint, demand is expected to be up, meaning higher prices and the need for a thorough evaluation of expected prices, yields and costs before growers determine what to plant in 2012.

Figure 1 shows the planted acres for select row crops in Georgia from 2006 through 2011. Producers’ planting decisions in 2011 resulted in an acreage shift to cotton and corn from soybeans and peanuts. Georgia producers increased planted cotton by 270,000 acres and corn by 70,000 acres. At the same time, there was a decrease in planted acres of soybeans (down 100,000 acres), peanuts (down 85,000 acres) and grain sorghum (down 10,000 acres). Wheat plantings increased 47 percent from 2010 (up 80,000 acres). Table 1 shows preliminary estimates of how net returns are likely to compare for Georgia row crops in 2012. Expected yields and variable costs are based on adjustments made to the 2011 UGA enterprise budgets for corn, cotton, grain sorghum, peanuts, soybeans and wheat.

Budget estimates should be used as a guideline or starting point for individual operations whose yields and local prices for inputs will vary. Producers are encouraged to utilize the budgets by entering their own numbers to determine which crop enterprise will provide the highest net return to their operation. Breakeven price and yield were also included in table 1 for producers to consider when making a pricing decision.

Table 1. Per Acre Net Return Above Variable Cost, Breakeven Price and Yield

<table>
<thead>
<tr>
<th>Non-Irrigated Production</th>
<th>Expected Avg. Price</th>
<th>Expected Yield</th>
<th>Income</th>
<th>Variable Costs</th>
<th>Net Return</th>
<th>Breakeven Price</th>
<th>Breakeven Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>$6.25/bu</td>
<td>85 bu</td>
<td>$331</td>
<td>$322</td>
<td>$210</td>
<td>$3.78/bu</td>
<td>51 bu</td>
</tr>
<tr>
<td>Cotton</td>
<td>$0.875/lb</td>
<td>700 lbs</td>
<td>$613</td>
<td>$442</td>
<td>$170</td>
<td>$0.63/lb</td>
<td>505 lbs</td>
</tr>
<tr>
<td>Grain Sorghum</td>
<td>$5.06/bu</td>
<td>65 bu</td>
<td>$382</td>
<td>$240</td>
<td>$142</td>
<td>$2.68/bu</td>
<td>91 bu</td>
</tr>
<tr>
<td>Peanuts</td>
<td>$7.00/ton</td>
<td>2,000 lbs</td>
<td>$1,015</td>
<td>$639</td>
<td>$376</td>
<td>$441/ton</td>
<td>1,827 lbs</td>
</tr>
<tr>
<td>Soybeans</td>
<td>$11.00/ton</td>
<td>30 bu</td>
<td>$330</td>
<td>$262</td>
<td>$48</td>
<td>$8.72/ton</td>
<td>24 bu</td>
</tr>
<tr>
<td>Conventional Wheat</td>
<td>$5.75/bu</td>
<td>55 bu</td>
<td>$316</td>
<td>$213</td>
<td>$103</td>
<td>$3.88/bu</td>
<td>37 bu</td>
</tr>
<tr>
<td>Intensively Managed Wheat</td>
<td>$5.75/bu</td>
<td>75 bu</td>
<td>$431</td>
<td>$341</td>
<td>$90</td>
<td>$4.56/bu</td>
<td>59 bu</td>
</tr>
<tr>
<td>Irrigated Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn</td>
<td>$6.25/bu</td>
<td>185 bu</td>
<td>$1,156</td>
<td>$633</td>
<td>$523</td>
<td>$3.42/bu</td>
<td>101 bu</td>
</tr>
<tr>
<td>Cotton</td>
<td>$0.87/bu</td>
<td>2,000 lbs</td>
<td>$1,050</td>
<td>$577</td>
<td>$445</td>
<td>$0.48/bu</td>
<td>699 lbs</td>
</tr>
<tr>
<td>Grain Sorghum</td>
<td>$5.81/bu</td>
<td>100 bu</td>
<td>$588</td>
<td>$331</td>
<td>$257</td>
<td>$3.31/bu</td>
<td>56 bu</td>
</tr>
<tr>
<td>Peanuts</td>
<td>$700/ton</td>
<td>4,200 lbs</td>
<td>$1,470</td>
<td>$749</td>
<td>$721</td>
<td>$357/ton</td>
<td>2,141 lbs</td>
</tr>
<tr>
<td>Soybeans</td>
<td>$11.00/ton</td>
<td>60 bu</td>
<td>$660</td>
<td>$358</td>
<td>$302</td>
<td>$5.96/ton</td>
<td>33 bu</td>
</tr>
</tbody>
</table>

1 Prices are expected spring-average prices based on market conditions in November 2011 and expectations for the beginning of 2012. Peanut price may be subject to a limit on quantity. All prices may be subject to change.
2 Includes land leasing, land rent, fixed costs and any custom harvesting, storage, hauling, etc., if necessary. Due to volatility in fertilizer and fuel prices and expected increase in demand for inputs, variable costs could change as much as +/- 5%.

The breakeven price is the price a producer must receive in order to cover their variable costs, or operating expenses, at the expected yield (found in the third column). The break-even yield is the yield needed to cover variable costs given the expected price. The expected average price for Georgia’s major row crops is found in the second column. The expected prices are estimates based upon current conditions (November 2011) and expectations for early 2012. Producers should consider forward pricing a portion of their production at prices that have the highest probability of profit. The breakeven prices and yields shown do not include returns to land (land rent) and management (payment to the producer). A producer should also account for these costs when selling their crop.

Relative net returns for non-irrigated production appear to favor peanuts and corn followed by cotton. Irrigated production appears to favor peanuts, corn and cotton. Peanut acres are likely to increase in 2012, but contracts may be based on limited quantity. Corn acres are likely to remain the same or increase slightly on irrigated land. Grain sorghum acres are likely to remain the same. Cotton acres are expected to decrease from 2011 levels. Soybean and wheat acres are expected to remain the same or be down slightly compared to 2011.


**Peanuts**

*Dr. Nathan B. Smith (nathans@uga.edu), CAES Department of Agricultural and Applied Economics*

The 2011 peanut crop was a mixed bag for growers in Georgia and across the Peanut Belt. Drought and record high temperatures stressed many acres, which lead to low yields. Some regions and areas of the state, however, saw better-than-expected yields due to timely isolated and scattered showers. Irrigation provided for record yields for several of Georgia’s growers, which helped offset poor non-irrigated yields. Overall, yields and production were down in 2011 creating a tighter-than-expected supply situation going into 2012.

At the start of 2011, peanut production was expected to be down due to a shift in acres for cotton production. Contracts for peanuts ended up not being competitive with cotton prices over $1, so peanut acreage dropped 11 percent in the U.S. and 16 percent in Georgia. Georgia growers reduced acreage from 565,000 acres to 475,000 acres. Regionally, the Southeast (Alabama, Florida, Georgia and Mississippi) dropped 17 percent (831,000 acres total). Alabama planted 20,000 fewer acres for a total of 170,000 acres. Florida increased planting by 17 percent to equal Alabama’s acreage total. Mississippi dropped 16 percent to 16,000 acres.

The Southwest (New Mexico, Oklahoma and Texas) peanut region was down dramatically at 28 percent fewer planted acres for a total of 141,000 acres. Texas in particular was down one-third from the year before to 110,000 acres, while New Mexico dropped to 7,000 acres. Oklahoma actually increased plantings by 2,000 acres for a total of 24,000. The Southwest experienced extreme drought causing some farms to run out of water for irrigation in Texas.

The Virginia-Carolina region (North Carolina, South Carolina and Virginia) saw planted acreage increase overall by 3,000 acres for a total of 175,000 acres. South Carolina upped planted acres to 77,000 for a 15 percent increase. However, North Carolina dropped plantings by 6 percent to 82,000 acres, and Virginia dropped plantings by 11 percent to 16,000 acres.

The 2011 peanut crop is pegged at 1.82 million tons, which is better than expected given the extreme weather conditions during the growing season. This is a 12.2 percent decrease from 2010 and is below the total use of peanuts. The National Agricultural Statistical Service estimates that U.S. growers averaged 3,275 pounds per acre, a 1 percent drop from the 2010 yield of 3,311 pounds per acre. The record average yield for the U.S. was set in 2008 at 3,426 pounds per acre.

Georgia’s crop is pegged at 3,400 pounds per acre with a wide range of yields realized by growers. Field averages ranged from zero to more than 6,000 pounds per acre. Regionally, the Southeast averaged 3,325 pounds per acre, the Southwest averaged 2,949 pounds per acre and the Virginia-Carolina region averaged 3,295 pounds per acre. The 2011 crop was better than expected yield wise but may be revised (up or down) due to later harvested peanuts.

Quality was once again an issue in 2011. Nonedible grades of Segregation 2 and 3 totaled about 50,000 tons in the Southeast. This is less than 2010 which had 89,000 tons and with just over 300,000 tons exported. Peanut exports made up 13.3 percent of total use with just over 300,000 tons exported. Peanut butter use grew by 1.8 percent. In snack and candy uses, Shelled edibles for peanut butter use grew by 1.8 percent.

Increased promotion of peanuts and peanut products appears to have helped increase the demand for use in candy and snacks. Domestic food consumption had a strong year growing to 1.42 million tons—a 7.7 percent increase over the previous year. The growth was attributed to a rebound in snack and candy uses. Shelled edibles for peanut butter use grew by 1.8 percent. Exports made up 13.3 percent of total use with just over 300,000 tons exported. Peanut crush was also up due to quality losses at nearly 300,000 tons (see figure 1).

**Forecast for 2012**

The U.S. Department of Agriculture projects a slowdown in growth for 2011-2012 and...
expects higher given prices due to short supply for 2012. Shelled prices have doubled since last year, and peanut butter manufacturers have raised the price for retail peanut butter. However, peanut butter demand is inelastic; a consumption response to an increase in price is smaller than the price increase. Peanut butter prices are expected to rise 25-40 percent, but a corresponding reduction in peanut butter use will be small given the few substitutions that still provide the protein value of peanut butter for a relatively low cost. Growth in domestic food use will likely be stunted. Promotion and advertising cutbacks for candy and snacks will mean a loss of the gains made during the past year in these categories. Therefore, USDA is forecasting less than 1 percent growth in domestic food use.

Peanut crush is mainly a by-product of peanut production where nonedible grades are crushed to produce peanut oil and meal. The domestic demand for peanut oil is currently greater than what is produced. The number of peanuts crushed for oil rose in 2011, and the forecast is for that number to drop back to a more normal level in 2012. However, if quality problems resurface with the 2012 crop, crush will once again be above normal (approximately 250,000 tons).

Seed and residual is also projected to return to about 180,000 tons. If acreage increases, then seed supply should also increase in order to meet demand. Therefore the projected figure could be closer to 200,000 tons. If shelling losses occur again, the final figure could be back up near the 2010-2011 figure of 250,000 tons.

Adding up the major categories of use gives a total consumption of peanuts for the 2011-2012 marketing year at 2.09 million tons, as projected by USDA. If realized, this would be a decrease of 7.5 percent in total consumption. Even with the forecasted drop in consumption, stocks into 2012 would drop to 331,000 tons. This is not the lowest stocks level by far but does represent only a three month supply. Less than three months causes concern especially if there are production problems the following year. The carryover has to keep shelling plants running from the end of July until the new crop is harvested; the peak of peanut harvest is usually mid-October.

Demand appears to be less of a question than supply going into 2012. Taking a lesson from 2011, the industry will want to insure enough acres are planted to at least meet total demand. Peanut prices to farmers rose from $550 per ton at the end of 2010 to $1000 per ton at harvest of 2011. Shelled prices have traded up to $1.30 per pound, which should translate to $1,200 per ton or better prices to farmers.

However, the majority of peanuts for the 2011 crop were contracted in the $550 and $625 per ton range. Uncontracted production received $900 per ton and higher. This sets the stage for 2012 to have higher expectations for price. As contracts offered to growers take into account where cotton and corn prices are headed, the high prices of harvest will not likely be offered in the spring for fear of over planting.

Table 1 shows preliminary projections for 2012 supply and demand. The main assumption is that a 13 percent increase in planted acres is needed at a 3,350 pound per acre yield to meet expected demand. The expected yield of 3,350 pounds is compared to an optimistic yield of 3,500 pounds per acre and a pessimistic yield of 3,200 pounds per acre.

<table>
<thead>
<tr>
<th></th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Higher Yield</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>% Lower Yield</td>
<td>2010/11</td>
<td>2011/12</td>
<td>2012/13</td>
</tr>
<tr>
<td>Beginning Stocks</td>
<td>915.0</td>
<td>758.0</td>
<td>531.0</td>
</tr>
<tr>
<td>Production</td>
<td>2,079.0</td>
<td>2,172.0</td>
<td>2,175.0</td>
</tr>
<tr>
<td>Total Supply</td>
<td>3,092.0</td>
<td>2,832.0</td>
<td>2,686.0</td>
</tr>
<tr>
<td>Total Use</td>
<td>2,268.0</td>
<td>2,192.0</td>
<td>2,128.0</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>758.0</td>
<td>531.0</td>
<td>661.0</td>
</tr>
</tbody>
</table>

Table 1. Preliminary Projections for 2012 Peanut Supply and Demand
Grains and Soybeans

Dr. Nathan B. Smith (nathans@uga.edu), CAES Department of Agricultural and Applied Economics

Corn is the No. 3 crop grown in Georgia in terms of acreage and value. It is followed by soybeans and wheat in farm gate value. However, acreage fluctuates from year to year in response to market prices. This has been the case since the 2002 Farm Bill when supply control was eliminated for peanuts. The decoupling of program payments has allowed production to respond to market signals.

In 2011 Georgia producers ended up increasing corn plantings and reducing soybean acres. Total wheat acres harvested was up over the previous year. Market prices rallied from the previous year and peaked in 2011 for corn, soybeans and wheat.

The 2011 growing season was a challenge for many of Georgia’s producers. Drought and record high temperatures caused a wide range of yields in corn and soybeans. Despite the challenging year, corn set a record yield at 152 bushels per acre, as the majority of acres were under irrigation. Wheat yields finally recovered after a couple years of poor results with a 55 bushel per acre average yield. Soybean production was hurt the most from adverse growing conditions resulting in 23 bushels per acre yield.

Nationally, corn and soybean yields were down in 2011, dropping to 146.7 bushels per acre and 41.3 bushels per acre respectively. Overall, wheat yields fell to 43.7 bushels per acre due to problems in the Plains.

Prices peaked in 2011 for grains and soybeans but have since fallen in response to outside market forces. Despite good fundamentals, corn and soybean prices fell precipitously during the month of November due to the rising value of the dollar and the exit of long positions by speculators. Price rationing seems to have impacted domestic demand while global supplies are poised to grow.

Corn

Georgia corn growers planted more acres in 2011 increasing by 17 percent to 345,000 acres. A total of 295,000 acres were harvested resulting in a record average yield of 152 bushels per acre. Total production in Georgia is estimated by the USDA National Agricultural Statistics Service at 44 million bushels of corn, an increase of 24 percent. The 2011 production represents about 17 percent of the total corn needed for livestock and ethanol production in Georgia. Irrigated corn acres in Georgia accounted for two-thirds of the total grain acres.

U.S. corn growers increased plantings 4.2 percent in 2011 to 91.9 million acres. The increase should have been enough to at least keep supply steady, but corn yields suffered yet again. The average yield was impacted by spring and summer conditions leading to a 146.7 bushel estimate that was adjusted down in the final crop production report.

Based on a harvested acreage of 83.94 million, total production for 2011 is estimated at 12.31 billion bushels. Production will fall short of total use of corn by nearly 300 million bushels, which will drop ending stocks to about 840 million bushels. All major categories of use—feed, food, industrial, seed and export—are projected to fall by the end of the 2011-2012 marketing year to 12.6 billion bushels.

Ethanol use is expected to be flat having hit the 10 percent blend wall. Total use for ethanol is projected at 5 billion bushels. Feed and residual use is expected to drop 4 percent to 4.6 billion bushels due to shrinking livestock inventory.

The value of the dollar will play a key role in U.S. corn exports as global uncertainty has rallied the dollar’s value. Corn exports will fall as the value of the dollar strengthens. Total exports are projected to be 1.6 billion bushels. Argentina is expected to increase their corn production, which will compete with U.S. corn in the export market.

Forecasts for the average season price of corn have been adjusted down since harvest to a range of $5.90 and $6.90 for the 2011 crop. The corn basis for Georgia growers varies across the state depending on location and demand by local users. Georgia growers’ best opportunity to price 2012 corn was probably in the summer of 2011, but there should still be opportunities to sell $6 corn in 2012.

While demand has responded to higher prices and global uncertainty has weighed on prices, the fundamentals of supply and demand still show a tight U.S. corn market. More acres will likely be planted creating a situation where prices could fall further with a trend yield of 162 bushels per acre. Another subpar production season, however, would keep supplies tight and prices near $6 per bushel.
**Wheat**

Wheat rebounded in Georgia following two years of poor crops and reductions in acreage. Planted acreage jumped by almost half to 250,000 last year in response to better prices. Georgia growers typically abandon one-third of the planted wheat acres, but a better looking crop led to fewer abandoned acres in 2011 with 80 percent of the acres harvested. A record yield of 56 bushels was harvested on 200,000 acres giving 11 million bushels in total production. Acreage for 2012 could be up as prices rallied in September when the base price for crop insurance was established.

U.S. wheat acreage grew by 1.5 percent to 54.4 million acres last year, but the hard wheats experienced a tough year with drought, particularly in the southern Great Plains. Harvested acres in the U.S. have been declining since 2008, and as a result total supply has shrunk. Ending stocks jumped in 2009 as exports dropped, and stocks have slowly been receding since. The world situation drives the market, and the historic shortage in 2008 led to an oversupply situation in 2009. Soft red winter wheat in particular has been burdened by growing stocks.

The 2012 outlook for wheat is for a few more acres to be planted in the production areas that suffered in 2011. Demand is pretty stable and stocks are still plentiful at 848 million bushels in the U.S. The main concerns are the weather and the value of the dollar impacting exports. Wheat prices have followed corn and soybean prices down to $6 per bushel for July 2012 futures. Prices to growers will be less than 2011 given trend yields. They will likely range between $5 and $6 per bushel unless conditions change as 2012 progresses.

**Soybeans**

Georgia soybean production was significantly cut in 2011 with fewer acres planted and a low average yield. Planted acres fell below 200,000 to 170,000—a 37 percent decline from 2010. Soybeans were not as competitive at planting and would have been even lower if not for drought conditions pushing late planted acres to soybeans. The average yield in Georgia suffered from the drought and high heat to average only 23 bushels per acre. Georgia soybean production is estimated to total 3.3 million bushels, down 50 percent from last year.

The U.S. soybean crop also fell in 2011 due to fewer acres and lower yields. Planted acres were down by 3 percent to 75 million and the average U.S. yield is projected at 41.3 bushels per acre. Total production is estimated to be 3.04 billion bushels, down 8.3 percent from last year.

While production is down, so is demand. Total use is projected to decline 7 percent to 3.04 billion bushels. In the U.S., exports are the main source of the decline; exports are projected to reach 1.3 billion bushels for the 2011-2012 marketing year. Exports to China continue to fall, but other sources have also fallen behind pace. Sales to the EU have also dropped significantly.

Foreign demand for soybeans is driven largely by China where sales have been disappointing and are expected to shift from the U.S. to South America at the beginning of 2012. Brazil is expected to produce a record crop with increased acreage and exceed U.S. exports for the second time. Argentina is expected to hold steady due to more corn planting in 2012. La Niña, however, could negatively impact Argentina
For the 2011 cotton crop, prices have ranged from around 95 cents to around $1.40. In 2012 U.S. cotton acreage could be down, but more normal acreage abandonment and yield could put production at or even above 2011 amounts.

World cotton demand has been weak. At times, U.S. exports for the 2011 crop year have been good, but exports are volatile and unpredictable due to global economic uncertainty and increased foreign production.

Price Frustration
Cotton prices have been excellent for the past two crop seasons. Futures prices for the 2010 crop reached over $2 per pound. Prices for the 2011 crop have thus far reached as high as $1.40 per pound. Historically, even $1 per pound of cotton is almost unheard of.

Despite these high prices, marketing decisions have been frustrating; many producers did not benefit from these high prices. For the 2010 crop, prices prior to harvest ranged from the low 70 cents to around $1.50 per pound. Prices were not expected to be over $1, and producers contracted most of their cotton at around $1 or less before prices began to increase. After harvest, prices increased to the $2 level, but by that time most cotton had been sold.

This past year, producers contracted a reasonable portion of their expected production during the winter of 2010 and spring of 2011 prior to planting when prices were often well over $1. The early summer drought then resulted in poor emergence and some acreage having to be replanted. Producers became concerned about being able to deliver on bale contracts and some decided to buy out the contracts. Later in the summer when production potential was better known, prices had begun to trend down and pricing opportunities had dwindled.

Prices for the 2012 crop are again attractive, but navigating this type of price volatility is crucial to profitability and risk management.

U.S. Situation
After three consecutive years of decline from 2007-2009 (due to high corn and soybean prices and competitive net returns), U.S. cotton acreage began to rebound in 2010 and then significantly more in 2011. U.S. producers planted 14.72 million acres of cotton compared to only 10.97 million in 2010. Due to severe drought in Texas and Oklahoma, acreage abandonment was a record high at 33 percent, and acreage harvested was only 1.15 million acres more than in 2010.

The U.S. crop is forecast at 16.3 million bales. Poor crop conditions and production uncertainty were major factors holding 2011 crop prices at even the $1 level. Had the U.S. crop been larger, it could easily have trimmed another 10-15 cents off the market.

2011 crop year exports are forecast at 11.3 million bales compared to 14.4 million bales last year. This would be the lowest U.S. export amount since the 2001 crop year. Exports were once forecast at 13.5 million bales but have been revised downward due to global economic concerns, less available U.S. supplies and increased competition from foreign exporting countries.

World Situation
The small supply of U.S. crop was offset, however, by good crops and increased foreign production. Foreign production will be up 11 percent from 2010. This and U.S.

export uncertainties kept a lid on prices as we progressed through the growing season.

China’s 2011 cotton production is expected to be 3 million bales more than in 2010, India is expected to be up 2.1 million bales and Pakistan is expected to be up 1.2 million bales. The Southern Hemisphere crop (Australia, Brazil and Argentina) is also expected to be a good one.
Demand
Since 2006, global demand for cotton has been flat. After years of steady growth and peaking in 2006 and 2007, demand has actually declined. This is due to the global economic slowdown/concerns beginning in 2008 and competition from man-made fibers. Demand declined 11 percent in 2008, rebounded some in 2009 but fell again in 2010. Demand is expected to decline slightly further for the 2011 crop year.

Demand for the 2011 crop was, at one time, forecast to be much stronger. As a small but better than expected U.S. crop and good foreign production combined with weakened demand, downward pressure was put on prices. In May of 2011, USDA forecast world demand at 119.5 million bales, but by November the forecast had been revised downward to only 114.27 million bales. Therefore, demand growth is expected to be slow. As the No. 1 user and importer of cotton in the world, China is expected to import more cotton during the 2011 crop marketing year. However, indications are that such purchases are being made, in part, to help rebuild low stocks rather than being an indicator of actual mill use. Building stocks from the 2011 crop may mean a reduced need for imports of the 2012 crop.

2012 Price Outlook
The days of $1.50 to $2 cotton may be over. This is because production and supply have increased and demand has weakened. The real question is whether or not the days of $1 cotton are also over.

U.S. cotton production in 2012 is likely to be near or above production in 2011. Even if acreage is reduced or stays about the same, a more normal abandonment would keep production up. Foreign production, however, is much more difficult to predict.

Demand has been weak and the stocks-to-use ratio has eased. Assuming U.S. and world production are about the same or higher in 2012, this scenario would not set the stage for continued high prices. On the other hand, if U.S. and world production is down and/or if demand improves, prices could remain near or even above current levels.

The most likely optimistic price outlook for 2012 will be 90 cents to $1.15 per pound. The most likely pessimistic outlook will be 70 cents to 85 cents per pound. Currently, December 2012 cotton futures are in the low to mid 90 cents.

Georgia Situation and Outlook
Georgia farmers planted 1.6 million acres of cotton in 2011—a new modern record surpassing 1.5 million acres in 1995 and again in 2000. The state average yield for 2011 is forecast at 837 pounds per acre, which if achieved, would be remarkable given the drought and other challenges during the season.

How much cotton under normal circumstances would actually have been planted in 2011 is unknown. Some acreage was replanted and some producers planted extra acres late to make sure they could deliver on bale contracts. Therefore, cotton acreage could be down in 2012. Strong competition is expected from peanuts and corn, to a lesser extent. Much will depend on contract prices for peanuts and the availability of contracts.
From 2004 to 2006 vegetable-harvested area consistently increased. In 2007 and 2008 harvested area decreased but increased again in 2009 and 2010. In 2011 a significant decrease of 29.4 percent was recorded, from 7.2 million acres to 5.1 million acres harvested.

Since 2009 total production has been declining from 1.33 million cwt. to 1.27 million cwt. in 2010 and 1.26 million cwt. in 2011. Despite the decline in harvested area and production, crop value increased from $18.7 billion in 2009 to $18.9 billion and $20.1 billion in 2010 and 2011, respectively—the highest we have had for the past decade.

On the other hand, while crop value is constantly increasing, unit value ($20.16/cwt. in 2004) declined to $15.82/cwt. in 2011. The record decline was in 2006 at $12.91/cwt. Since then, we have observed a steady rise even though the 2011 unit value is still 21.5 percent lower than in 2004.

It is interesting to note that Americans eat less vegetables today—419 pounds per capita compared to 448 pounds per capita in 2004. U.S. exports have been on the rise from $3.5 billion in 2004 to $6.2 billion in 2011 representing a 78.6 percent increase. Despite this positive export record, import demand has been rising more than exports. Consequently the vegetable industry has also been experiencing a negative balance of trade—$2.7 billion in 2004 to $3.9 billion and $3.8 billion in 2010 and 2011, respectively.

Vegetable Prices
Overall, commercial vegetable prices were strong in the first quarter of 2011 compared to 2010 and 2009 but took a downward turn in the fall season. However, growers had already made planting decisions despite the exhibited fall, sluggish price; Georgia is expected to increase planted area by 3 percent, California by 6 percent and Florida by 2 percent. One exception important for Georgia was onions, which started with a depressing price but made a quick recovery that could offset the first quarter. In October 2010 the wholesale price at the Chicago shipping point for machine-picked round green beans from Georgia, Florida and Michigan sold for $18 per bushel carton compared with $33 in 2011, reflecting an 83.3 percent increase. Eggplant from Georgia and Florida sold for $25 per one carton (one-ninth bushel) in 2011 compared to only $18 per one carton in 2010; a 31.6 percent increase in the same time period. On the other hand, cabbage and turnip greens all experienced a decrease of 4 percent.


<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Harvested</td>
<td>Th. ac</td>
<td>6,581</td>
<td>7,128</td>
<td>7,139</td>
<td>6,852</td>
<td>6,648</td>
<td>6,851</td>
<td>7,165</td>
<td>5,075</td>
</tr>
<tr>
<td>Production</td>
<td>Ml. cwt</td>
<td>1,355</td>
<td>1,281</td>
<td>1,285</td>
<td>1,332</td>
<td>1,278</td>
<td>1,331</td>
<td>1,267</td>
<td>1,269</td>
</tr>
<tr>
<td>Crop Value</td>
<td>$ mil</td>
<td>15,533</td>
<td>15,906</td>
<td>16,601</td>
<td>17,385</td>
<td>18,591</td>
<td>18,711</td>
<td>18,184</td>
<td>20,069</td>
</tr>
<tr>
<td>Per Capita Use</td>
<td>Lbs</td>
<td>448</td>
<td>441</td>
<td>430</td>
<td>433</td>
<td>420</td>
<td>422</td>
<td>424</td>
<td>419</td>
</tr>
<tr>
<td>Unit Value</td>
<td>$/cwt</td>
<td>20.16</td>
<td>20.21</td>
<td>12.91</td>
<td>13.05</td>
<td>14.54</td>
<td>14.11</td>
<td>14.48</td>
<td>15.82</td>
</tr>
<tr>
<td>Import Value</td>
<td>$ mil</td>
<td>6,185</td>
<td>6,570</td>
<td>7,275</td>
<td>7,921</td>
<td>8,514</td>
<td>8,401</td>
<td>9,390</td>
<td>10,026</td>
</tr>
<tr>
<td>Export Value</td>
<td>$ mil</td>
<td>3,468</td>
<td>3,560</td>
<td>4,233</td>
<td>4,621</td>
<td>5,418</td>
<td>5,382</td>
<td>5,360</td>
<td>6,195</td>
</tr>
<tr>
<td>Balance of trade</td>
<td>$ mil</td>
<td>-2,717</td>
<td>-3,010</td>
<td>-3,042</td>
<td>-3,300</td>
<td>-3,096</td>
<td>-3,019</td>
<td>-3,939</td>
<td>-3,831</td>
</tr>
</tbody>
</table>


### Point of First-Sale (Farm/Grower) Price for Fresh-Market Vegetables

**Tomatoes**

- **Cents/pound**
- **2011**
- **2010**
- **2009**

**Onions**

- **Cents/pound**
- **2011**
- **2010**
- **2009**

**Commercial Vegetables**

- **% of 1990-92**
- **2011**
- **2010**
- **2009**

**Carrots**

- **Cents/pound**
- **2011**
- **2010**
- **2009**

The U.S. fruit and nuts industry experienced a significant increase in consumer price index (CPI) of 334.7 (1982-84=100) in August 2011. Compared to 2010, the consumer price index started off higher and maintained its strong hold throughout the year (see figure 1).

The Georgia fruit and nuts industry has been performing extremely well and is growing exponentially. Georgia produces several fruits such as strawberries, grapes, apples, blackberries, blueberries, grapes, peaches and pecans. All performed well in terms of prices received in 2011 and contributed to the increase in growers price index (GPI) (see figure 2).

Pecan Situation
Pecans have always dominated Georgia's fruit and nuts industry, but its share is beginning to drift from above 50 percent in the past decade to below 50 percent today. Nationally, Georgia is ranked eighth in terms of fruit and tree nut crops value with 11.2 percent increase from 2009-2010.

Georgia still ranks first in pecan production followed by New Mexico and Texas. New Mexico's production is expected to decrease by 14 percent from last year, while Texas is suffering from extreme temperature—above 100 degrees Fahrenheit. More importantly, the Texans have been experiencing pest problems that have seriously affected their yield and overall productivity. Although Georgia is also facing water and drought problems, most of its pecans are estimated to be in fair to excellent condition with an expected 80 million - 90 million pounds in 2011, which is similar to 2010 even though it was an off-year production season.

Nationally we are expecting pecan production of 246.5 million-261.0 million pounds. Despite the fact that we are in an on-year season, the national quantity for 2011 is expected to be lower than 2010 when 293.7 million pounds were produced in an off-year. Due to this shortage in production and the increasing demand at home and abroad, growers and consumer prices are expected to remain high and strong throughout 2012.

Blueberry Situation
We are beginning to see a new trend in this rapidly growing industry. Although Michigan and Maine are still the largest producers of blueberries in the U.S., their amalgamated total utilized production share, which was 60 percent in the 1990s, has decreased to 40 percent between 2008 and 2010. The decrease in their combined share was exacerbated by the significant increase in production from competing states such as Georgia, Washington, Oregon, North Carolina and New Jersey. These competing states have increased planted areas and bettered their yields due to improved cultural practices, adopted cultivars and continuous scientific and applied research. Despite all these factors, the overall quantity demanded is still lower than supply, which is keeping the price up. Blueberry production in Florida is picking up, and that might create marketing problems for Georgia if their harvesting seasons coincide with our market window.

Other Fruits
Georgia grape production decreased to 8 million pounds in 2011 from 9 million in 2010. Despite the decrease in production, prices received by growers also decreased from 74 cents to 64 cents per pound. However, peach prices increased from 27 cents in August of 2010 to 31 cents per pound in August 2011. Fresh strawberry prices also increased from 82 cents to 92 cents in the same time period. These price increases in almost all the fruits and nuts contributed to the strong consumers and growers price indexes.
Using the farm gate value data as a point of reference, the environmental horticulture industry, or the green industry, generates slightly over 6 percent of Georgia’s total farm gate value ($700 million). The environmental horticulture commodities include container nursery-plant production, field nursery production (shade and flowering trees), greenhouse or floriculture production, turfgrass or sod production and miscellaneous ornamental horticulture such as cut flower and foliage production.

Production issues have not stymied Georgia’s environmental horticulture industry; the problems have arisen on the marketing and service functions of the industry. The state and global economic blight, drought, unemployment, arranging debt capital or credit, dwindling household incomes (among the unemployed and underemployed), residential housing foreclosures and minimal construction of commercial or residential properties constrained the demand for environmental horticulture in 2011. Immigration reform in Georgia, especially E-Verify, has had a major impact on the lawn care services and landscape installation and maintenance as well.

The key industry success factors continue to be economies of scale, production and marketing of premium quality plants, expansion of export markets, use of appropriate growing structures or facilities and technology and wise water management. Georgia’s economic outlook continues to be gray and cloudy but with mild growing pains. Plant breeding programs will continue to be in the forefront—developing new plants with enhanced appearance, durability, better root systems, drought tolerance, vibrant colors and fragrances as well as longer shelf life in the marketplace and at the customer’s point of usage. Such plants will stimulate demand from florists, interiorscapers, garden centers and consumers alike.

Profit margins will suffer for growers in 2012 (perhaps into single digits) as price competition puts the squeeze on operating incomes and input and production costs continue to climb. Consumer spending and disposable incomes will only inch upward as personal needs are addressed first and unemployment rates drift lower. Additionally, 2012 will be a year of farm bill discussions, election rhetoric and budget balancing at the federal level. Already USDA agencies such as NASS and ERS have eliminated many of the data resources for making informed management decisions because of funding curtailments for commodity surveys and primary data development, including the floriculture and nursery industry annual reports.

Despite the apparent gloom and doom, consumers and lovers of environmental horticulture should have no supply-shortage fears. If growing intentions are fulfilled, there will be an ample supply of locally grown shade and flowering trees and shrubs from field nurseries; flowers, shrubs and ground covers from container nurseries; flowers and foliage from greenhouse operations; and sod and turfgrass from Georgia’s sod producers. However, many of the items may be at slightly higher prices than in 2011. The demand elasticity for most environmental horticulture products is inelastic, meaning consumers respond to price changes at a lower consumption percentage change than was the price percentage change. For the marketer and producer this means a price increase is their primary means of capturing revenue and regrowing their business in 2012.
Beef
Dr. R. Curt Lacy (clacy@uga.edu), CAES Department of Agricultural and Applied Economics

2011 Review
Beef producers received record high prices for their products in 2011. Unfortunately, dry weather and higher input costs tempered profits and made for a stressful year.

Prices for 500-600 pound calves in Georgia approached $150/cwt. in the spring and averaged roughly $125/cwt. for the year (see figure 1). Prices for 1150-1250 pound slaughter steers ranged from $115-125/cwt. during the same time period.

Simultaneously, severe drought conditions increased feeding costs and caused herd reductions or liquidations from Arizona to Virginia. In fact, at one time during the summer, over 40 percent of the nation's beef-cow herd was in states considered to be in extreme drought or worse. The net effect was that even though sales prices were higher, profits improved only slightly due to the lower production caused by the drought and higher costs of inputs.

2012 Outlook
Total beef production will be reduced by 4-5 percent due to drought-driven herd liquidations and high feed costs (see figure 2). USDA currently projects that U.S. beef production will decline to just barely 25 billion pounds—the lowest in quite some time. As a result, cattle and beef prices should be the same or higher in 2012 (see figure 1). However, there are several influencers, including macroeconomic factors, weather and the corn market, that could stymie price increases and profits.

The domestic and global economies continue to weigh heavily on consumer's minds and ultimately their pocketbook. In mid-November 2011, there were growing concerns about the potential for debt contagion from Greece and other countries within the EU. While the EU imports very little U.S. beef, any debt default by a major EU member could cause significant trauma to the world's banking and finance industry, resulting in a drop in demand for all beef products.

In the U.S., continued high unemployment and the uncertainty created by deficit and debt reconciliation committees in Congress continued to cast a shadow over consumers' confidence in 2011. Until consumers have more actual money to spend and feel more comfortable about the U.S. economy, it will be hard for beef prices to increase much at the retail level.

Dry weather had major implications on the industry in 2011, and those effects will only increase in 2012. Currently, all publicly available weather forecasts predict below normal precipitation for the southeastern U.S. and the Southern Plains through at least June 2012. If realized, the implications of these predictions are dire because cattlemen have already tapped hay reserves fairly extensively during recent months, and little hay was accumulated this year. As a result, feed stocks are razor thin with no room for additional needs.

In addition to weather-related cattle concerns, there is also much risk associated with feed-grain prices. A smaller than expected 2011 corn crop combined with increasing usage of corn for ethanol and exports kept prices upwards of $7 per bushel in 2011. Currently, USDA projects steady to slightly improving corn stocks headed into 2012. However, there is also not much room for error in these forecasts either. As a result, any positive news for the corn markets such as increased exports, higher fuel prices, etc., will have negative effects on Southeastern calf prices.

However, there is still quite a bit of good news in the beef industry. While a smaller cow herd, resulting in smaller calf crops and fewer feeder cattle, are symptomatic of challenges in the beef industry, the implications...
Beef, continued

are generally favorable. Supplies of cattle are so tight that any favorable demand news, i.e., an improved economy, increased exports, etc., could result in an extreme escalation of prices.

Also, one of the major bright spots for the beef industry in 2011 was increased exports. Through October, U.S. exports of whole muscle cuts were besting 2010 exports for the same period by 32 percent. This trend is expected to continue into 2012 as USDA projects U.S. beef exports to remain steady or slightly increase at 2.76 billion pounds—11 percent of total U.S. beef production.

The combination of these two factors along with other favorable demand developments will be very supportive of cattle prices in 2012.

Summary
The overall outlook for 2012 is for higher cattle, feed and input prices with improvements in profits hanging in the balance. If it rains in 2012 and the economy improves, profits will be very favorable. Alternatively, if significant precipitation does not occur during the 2012 winter, then cattlemen will be faced with a daunting challenge. In any event, tight supplies and stable demand means steady to higher cattle prices in 2012.

Figure 2. Commercial Beef Production
Quarterly 2006-2010 Average, 2011-2013
2011 Review

The hog market had a historic year in 2011. For the first time ever, weekly net national hog prices exceeded $100/cwt. More impressively, prices managed to stay there for some time before receding to lower levels (see figure 1). The main contributor to these higher hog prices was record net exports with resulting strong wholesale (cutout) values.

Through September 2011, net prices on a carcass-weight basis were running almost 19 percent ahead of 2010 levels and a full 37 percent of the five-year average. With carcass weights increasing to 204 pounds, the net effect was an additional $28 per head in revenue compared to 2011. When adjustments for carcass-weights are made, market hogs in 2011 were worth almost $50 per head more than the five-year average.

2012 Outlook

Several factors shape the pork outlook for 2012; namely increased production, higher exports and an improved economy.

Production and Supplies. Pork production is expected to be slightly up in 2012. Both the USDA and Livestock Marketing Information Center project total pork production to be somewhere in the range of 22.8 billion-22.9 billion pounds, an increase of 1-2 percent (see table 1).

This modest increase in expansion is a testament to pork producers’ attitudes toward risk considering the recent record prices. Essentially, it shows that while prices were good and profits were considerable in 2011, the input-price outlook is so uncertain that they are not quite willing to bet a lot of money on things staying the way they are.

Exports. The U.S. continues to be the world leader in pork exports, which is beneficial to our domestic producers. Even though we account for less than 10 percent of global production, we export more than one-third of the pork that is traded worldwide, and the level of exports continues to grow. In 2004 exports accounted for 13 percent of U.S. pork production, and net pork exports accounted for 8 percent of production. By 2011 exports represented 22 percent of domestic pork production with net pork exports accounting for 18 percent.

Economy and Demand Implications. As is the case with all protein products, much of the hopes for 2012 are built on an improving economy. Most economic forecasts predict a gradual economic recovery headed into 2012. If this improvement materializes, it will be a mixed blessing for swine and pork producers. An improving economy will likely increase demand for pork and help to increase prices. On the downside, an improving economy will lead to higher fuel and feed prices. In the final analysis, however, an improving economy will do more to help than to hurt.

Prices and Profitability. It will be hard for 2012 to repeat the performance of prices and profits of 2011, and it most likely won’t. Prices are expected to remain about the same or slightly lower due to slight increases in production in 2012. Profits are expected to remain positive, though slightly lower than 2011, due to higher feed costs and static prices. Projections for production and prices for 2011 are shown below in table 1.

Downside price risk for pork producers should not be a major issue in 2012. The major concerns will continue to be input-price risk, specifically grains. Heading into 2012 there is quite a bit of concern regarding global and domestic grain production and usage. Moreover, the increasingly strong linkage between petroleum and grain prices puts feed users at risk as the economy begins to improve. As a result, these volatile grain and oilseed markets will require pork producers to manage not only their sale price risk but also their input-price risk.

Summary

2011 was an exceptional year for pork producers as record sales prices offset much higher feed costs. 2012 is looking to be a good year as well; although it is unlikely that it will be quite as great as 2011. While an improving economy will be supportive of pork prices, any significant improvement in the economy will likely also mean higher energy and grain prices, which will temper profits.

Dr. R. Curt Lacy (clacy@uga.edu), CAES Department of Agricultural and Applied Economics

| Table 1. Production and Price Projections for 2011 and 2012 |
|-------------|-------------|-------------|-------------|
| Production  | Prices       |
| (Bil. Lbs.) | ($/Cwt. Carcass Basis) | 2011 | 2012 |
| Q1          | 5.72        | $78.38      | $81-$88    |
| Q2          | 5.37        | $89.49      | $89-$95    |
| Q3          | 5.66        | $92.71      | $91-$90    |
| Q4          | 6.07        | $81-85*     | $82-$88    |
| Year        | 22.62       | $85-86*     | $87-94     |

Sources: LMIC, USDA and University of Georgia.

* preliminary estimates for 2011

Figure 1. Net Slaughter Hog Prices National, Weighted Average Carcass Price, Weekly

Source: USDA-AMS, compiled by LMIC.
Georgia will begin 2012 with approximately 260 dairy operations, which are collectively expected to produce about 1.38 billion pounds of milk during the year. The number of dairies in the state has declined substantially over the past decade—from 394 at the beginning of 2001 to 260 by the end of 2011. Losses have been primarily among smaller dairies milking 200 or fewer cows, while the number of dairies milking 750 or more cows has increased as the remaining farms grow larger.

Although Georgia’s dairy herd declined on average by about 2 percent annually (from 97,000 cows in 1996 to 77,000 in 2010), cow numbers have held steady for the past couple of years as existing farms have expanded and several new ones have been established. The historical decline in cow numbers has been offset to some extent through efficiency gains as milk per cow has increased. The net effect on Georgia’s total milk production was a slow but steady erosion of about 4 million pounds, or just under 1 percent per year, from 1.42 billion pounds in 2000 to 1.38 billion pounds in 2011.

Milk production is highly concentrated in central and southwest Georgia, where the top five milk producing counties are home to 44 percent of the state’s dairy herd and produce an equivalent percentage of its total milk production. Just under half of all milk produced in Georgia goes to supply fluid milk bottling plants in the state, while the remainder is transported south to the Florida market.

Milk prices are characterized by volatility in the form of multiyear price cycles. Following two years of record high milk prices in excess of $22/cwt. during 2007 and 2008, Georgia dairy farmers saw milk prices plummet below $16/cwt. during 2009. Prices recovered to around $20/cwt. in 2010 and reached a new record high of $23/cwt. in 2011. Consequently, prices can once again be expected to cycle downward in 2012, as a result of milk production growth, ample stocks of manufactured dairy products and the likelihood of reduced exports. Prices are not, however, expected to fall as sharply as in past cycles and may be expected to average between $19/cwt. and $21/cwt. during 2012.

Global Market Influence
Although Georgia’s dairy industry is primarily based in Georgia and Florida markets, local milk prices are increasingly influenced by regional, national and even international supply and demand conditions for dairy products. Federal Milk Marketing Order milk prices are minimum prices that must be paid by milk processors to dairy farmers. Federal Milk Marketing Order policies tie local milk prices to national dairy commodity market conditions. National conditions may, in turn, be influenced by global dairy markets. World demand for U.S. dairy exports is likely to prove sluggish in 2012 as strong milk production in Australia and New Zealand will mean more milk and milk components for sale on the world market and downward pressure on prices.

U.S. Market Prices
Strong U.S. milk production in late 2011, coupled with weak domestic dairy product sales and exports, set the stage for lower dairy commodity prices and consequently, lower farm milk prices in 2012. The past year saw U.S. milk prices at or near record highs as the recovery that began in 2010 continued. Milk prices grew by about 18 percent over 2010 levels as production increases slowed during the first half of the year and demand for U.S. dairy exports strengthened. Current dairy market conditions suggest that farm-milk prices will weaken only moderately during 2012. Weaker demand for U.S. dairy exports in 2012 will lead to increasing domestic stocks of manufactured dairy products. The resulting lower commodity prices, coupled with small increases in milk production, will result in moderate farm level price decreases and reduce the level of returns over feed costs to producers. Feed costs are expected to remain high in 2012, further reducing returns to dairy farmers and leading to less intensive feeding practices and increased culling rates.

At a national level, milk production can be expected to grow at a rate of between 1 percent and 1.3 percent during 2012, compared to historical average annual baseline growth of about 2 percent. This modest growth rate will reduce the chance of steep price declines associated with past dairy price cycles.
Consequently, milk prices during 2012 can be expected to decrease by only 7-10 percent from levels prior year levels.

**Georgia Forecast**

Georgia is located in the Southeast Federal Milk Marketing Order. As a part of the Federal Milk Marketing Order system, milk prices in Georgia are tied to national prices for manufactured dairy products and adjusted upward to account for the fact that the state is “milk deficit” (consumes more milk than it produces). Milk prices in Georgia will follow the national trend of decreasing by an estimated 7-10 percent with a fall from the 2011 Georgia average of $23/cwt. to about $20-21/cwt. during 2012. Georgia’s milk production will likely remain stable, as it has for the past few years, at about 1.38 billion pounds a year. Continuing, high production costs may reduce short-term profitability as feed and energy costs rise faster than milk prices. This cost increase will once again force Georgia dairy farmers to tap into farm equity until prices recover to more profitable levels.

**Summary**

2012 milk prices are expected to decline only modestly from 2011 levels as export demand slows in the face of global competition and domestic milk production continues to increase. In 2012, Georgia producers should see mailbox milk prices average between $20/cwt. and $21/cwt., 7-10 percent below 2011 prices, as shown in the graph at left.
Poultry
Dr. John C. McKissick (jmckiss@uga.edu), CAES Center for Agribusiness and Economic Development

Broiler Profit Outlook
The original 2008-2009 poultry horror movie featured a script of increased production followed by historically high feed prices and closed as a financial loser with fewer actors than when it began. A 2011-2012 remake is in the works starring some of the same cast, except this time around the primary antagonist—feed prices—looks to have a longer lasting part. While the finale has yet to be written, it is likely to have a similar ending. Hope for a better conclusion to the 2012 story lies with an improved broiler demand, greater than expected reduction in poultry production or moderated feed prices. One thing is for sure, the current version will be running at least until mid-to-late 2012.

Of all the factors that could change the industry’s negative outlook to positive, significantly reduced feed cost seems least likely to return this time around. Unlike previous tight grain supply-and-demand years, the conditions needed to relieve the potential imbalance seem to have disappeared, leaving a downright scary situation for livestock producers and—in particular—poultry producers.

In 2011, a 5 percent increase in corn acreage, the second highest since 1944, was negated by poor growing conditions even before the crop was in the ground. Therefore, a smaller than desired crop has to be rationed between feed users and importers. A growing, mandated and thus fixed corn ethanol demand will take about 40 percent of the crop right off the top of the bin as compared to 31 percent in 2008-2009. Importers and feeders will have to fight for the remainder of the 2011-2012 crop by bidding higher prices. While 2012 may bring hope for a better crop year, barely any of the 2011 crop will still be in the bins as 2012 harvest begins, leaving little cushion for shortfalls. Therefore, significantly lower grain and feed prices seem unlikely to return in time to lift broiler players to a meaningful payday.

Broiler production grew by about 5 percent in the first half of 2011 after a generally profitable 2010. As the year progressed, poultry producers realized that grain prices were not likely to retreat from historically high prices and began to apply the brakes to bird production. Broiler egg sets and placements were reduced by 7 percent and 5 percent respectively in the third quarter of 2011. While broiler slaughter numbers declined, broiler meat production did not, as weights per bird remained high through the third quarter. Broiler production in all of 2011 is estimated to exceed 2010 production, despite the late year production brakes, by over 1 percent.

Broiler production in 2012 should fall in light of the dismal profit situation. The questions, however, are how much of a drop is needed and how will it be accomplished? As of the last quarter of 2011, producers seemed to be on a pace through lower placements and a 3 percent reduction in the broiler hatchery flock to reduce the first half of 2012 production. Assuming slaughter weights return to levels of previous years, broiler production for the first six months of 2012 should be down around 2 percent as compared to 2011. Barring any unforeseen changes in demand or cost, more cuts should be scheduled for late 2012. However, at this point a reduction of just over 1.5 percent is projected for all of 2012.

In 2009 producers sliced production by close to 4 percent. Overall capacity was reduced as plants closed and the largest U.S. producer declared bankruptcy. Large, multimeat producers seem better positioned in 2012 to weather the cost/price storm. However, some regional firms dependent on broiler products alone may be vulnerable. Growers experience reduced cash flow as placements are slowed but no cash if a plant and production complex is closed. Obviously, the manner in which reductions are accomplished is paramount to impact, but it does seem a larger production cut is needed in 2012 than is currently anticipated in order to move prices significantly.

Domestic and international demand is another important factor to consider in the broiler outlook for 2012. 2011 has been a year in which white meat prices weakened while dark meat improved relative to 2010. For the first three quarters of 2011, boneless breast prices averaged 17 percent lower than in 2010. Leg quarters, on the other hand, averaged 20 percent higher. Given the supply increase in the first of 2011, lower prices could be expected, but the size of the white meat decline may once again suggest some decline in demand. For dark meat prices to increase with supply, significant demand from both the domestic market as well as exports must be present. A larger broiler meat supply does not translate into proportional increases in dark and white meat cuts as larger bird weights may have produced relatively more white meat than dark.

Competing meat supplies will be reduced in 2012 as they were in 2011. Red meat production, particularly beef, will be smaller and should provide some support for broiler prices. Little demand support is expected from the stalled economic recovery and high unemployment. Unexpected gains may accrue to the lower broiler meat price and cuts relative to the expected continuation of high pork and beef products.

U.S. broiler exports should improve in 2012 from 2011. As always, trade disputes and economic retaliation by countries for other U.S. policy threatens meat exports and makes export forecast extremely difficult. The administration’s forwarding of long negotiated free-trade packs with Panama, Columbia and South Korea could provide export support for all meats. The relatively low long-term value of the dollar against other world currencies should continue to provide export support. The dollar’s
standing in world currency markets has been highly variable as world events such as European debt problems, political unrest in the Middle East and world disasters have, on occasion, sent the dollar value higher despite continuing U.S. trade deficits and amounting debt. Overall broiler exports are projected to increase by over 4 percent in 2012, regaining most of the 2011 export decline. If achieved, exports would approach 18 percent of production providing some support for broiler prices.

Per capita domestic supplies of broiler meat (net production of exports) will fall by more than the forecast decline in production but still short of the 2008 and 2009 cuts. A 2012 decline in per capita supplies would be the fourth year-over-year decline of the last six years. In 2011 broilers were the only major meat facing an expanded U.S. per capita supply. The expansion along with white meat demand likely helps explain the lack of broiler price gains relative to other meats. If realized, the 2012 supply of broilers to be marketed will be about 3.5 pounds less than the 2006 record. The forecast levels of production, growth in foreign demand and an unsteady U.S. market should result in whole-bird values a little more than 4 percent higher than realized in 2011. Improved domestic demand or even larger cuts in production would be needed to boost prices higher.

The projected 2012 price falls short of the prices needed to restore general profitability to the broiler industry unless costs are significantly and unexpectedly reduced. Feed costs seem to be sticky at current high levels, given the size of the 2011 crop, until the 2012 crop is planted. Transportation, energy and labor costs are up over 2010 costs, making for the continuation of a tight profit margin at best. At worst, expect more adjustments to occur in the industry in 2012 with resulting grower and producer impacts.

**Turkey Prices and Returns**

In 2011 turkey markets were in contrast to broilers. Turkey production grew by almost 2.5 percent, but prices jumped by double digits. Thus, turkey folks enjoyed a better margin than broiler producers did despite historically high feed cost. Per capita supplies actually declined, as exports took a 12.7 percent leap over 2010 amounts. Given the uncertainties of 2012, turkey producers are not likely to grow production despite the good prices of 2011. Production will likely remain around the 2011 level or slightly decline in light of the feed-cost explosion. With steady to slightly lower production and modest export declines, per capita production will show the fourth straight year of decline. Turkey prices should stay around or be slightly lower than the $1 per pound mark of 2011. Turkey producer’s profit margins would be tight but positive given the situation outlined for 2012.

**Egg Industry Outlook**

Egg producers face 2012 with many of the same questions as meat producers. While production has inched up since 2008, prices have remained at very favorable levels. The price in 2011 was strengthened by strong export growth and improved demand. In 2012, production will decline due to the high-cost situation. Egg exports are not expected to maintain 2011’s pace given the world demand situation. Per capita table egg supplies are expected to decline by more than the production of 2012. Given the stagnant domestic economy, table egg prices are likely to show weakness and are projected to decline 6 percent from 2011’s yearly average. Such a drop in light of the feed-cost situation may leave the industry searching for favorable margins in 2012.
Biofuels

Dr. George A. Shumaker (shumaker@uga.edu) and Audrey Luke-Morgan (audreylm@uga.edu), CAES Center for Agribusiness and Economic Development

Ethanol
Profitability has returned to the ethanol sector due to rising prices for petroleum. Ethanol prices closely track gasoline prices as can be seen in figure 1. Federal mandates requiring use of ethanol in motor-gasoline fuel blends provides the base for demand of ethanol. The EPA Renewable Fuels Standards for 2011 require about 14 billion gallons of ethanol to be blended with gasoline—about 8 percent of total gasoline fuel use. In 2012, the standard rises to about 15.2 billion gallons of ethanol—about 9 percent of total gasoline fuel. Due to these requirements the demand for ethanol will increase.

The run-up in gas prices that began in early 2009 has steadily continued throughout 2011 and has dragged ethanol prices alongside. Ethanol producers have seen profits return despite continued high corn prices as product price gains for both ethanol and distillers grains (DDGS) offset rising input prices. Late 2011 profitability has increased to about 40 cents per gallon from just over breakeven levels during much of the first half of the year, according to the Ag Marketing Resource Center of Iowa State University. The Blender's Fuel Tax Credit is 45 cents per gallon for 2011. Without this credit, few producers would be able to operate profitably in the current environment.

Other issues generating interest within the ethanol community is concern about production approaching the "blending wall." The blending wall is defined as the minimum volume placed upon by the EPA for the mandated use of ethanol in U.S. fuel blends. While the volume is currently scheduled to increase steadily until 2022, some view this as having potential limit to growth within the industry. My view is that the industry has grown primarily due to the EPA mandates as well as the blender's credit, and it would likely be considerably smaller than current capacity without these factors. The view of a wall to industry growth seems also to be based upon a focus only on domestic market potential and ignores the export market potentials. Exports of ethanol have been quite variable over recent years but have been better than average during the last three. The volume is still quite modest as the greatest exports recorded in the 2009-2010 marketing year was about 260 million gallons, or about 2 percent of production. The largest volume buyers were Canada, EU nations, Brazil and Mexico.

Biodiesel
The biodiesel situation has greatly improved for producers since the beginning of 2011. After a nearly two-year run of operating losses and declining production, prices have risen to more than $1 per gallon since the beginning of the year and stood at about $5.50 in mid-November. Soybean oil and other potential feed stock prices have held fairly steady during 2011, and thus producer margins have moved into the positive territory, striking above $1 per gallon in October (courtesy of Ag Marketing Resource Center, Iowa State University). Producers have responded to the increased profit incentive and ramped up production from about 37 million gallons per month in early 2011 to 119 million gallons during September of the same year.

Figure 2 tracks the relationship between retail highway-diesel prices and wholesale biodiesel prices. These product prices tend to track along together. It is interesting to note that during 2011, biodiesel prices have trended steadily higher until early October while retail diesel prices have trended slightly lower from April into October.

EPA Renewable Fuel Standards require about 800 million gallons of biodiesel to be blended during 2011. That requirement rises to 1 billion gallons during 2012. Biodiesel production in the U.S. during 2010 was 315 million gallons, 545 mg in 2009, 691 mg in
In June of 2009, the U.S. had production capacity of about 2.7 billion gallons at 173 plants. As a result of the production falling short of the mandate requirements, EPA has not enforced the blend requirement. The current blender’s credit is $1 per gallon, however, there have been attempts to end this program.

**Outlook**

The biofuels markets remain in flux as federal mandates direct demand and subsidy support prices. The ethanol industry also continues the search for a competitive technology for converting cellulose and/or algae into fuels, so far unsuccessfully. Tight corn and soybean supplies for the coming year will place stress on producers unless petroleum prices remain at high levels. Biodiesel producers will continue to exploit alternative feed stocks in an attempt to produce at cost levels that will yield positive returns.
Value-Added Agribusiness

Dr. Kent Wolfe (kwolfe@uga.edu) and Sharon P. Kane (spkane@uga.edu), CAES Center for Agribusiness and Economic Development

Importance of Food and Fiber in Georgia

As in recent years, food and fiber industries continue to have a substantial presence in the Georgia economy encompassing the following sectors:
• agricultural and forestry production, including support services;
• food and fiber processing and manufacturing;
• product inputs;
• food retail and wholesale trade; and
• food services.

The most recent data available shows that the total food and fiber sector employs 688,386 Georgia workers and has annual sales of nearly $107 billion. This magnitude ranks the total food and fiber sector high among all of Georgia’s economic sectors, with more than 13 percent of the total employment in the economy, nearly 16 percent of the economy’s output and over 11 percent of the value added. Value-added agribusinesses represent a host of opportunities for Georgia’s food and fiber sectors, many of which depend on consumer spending patterns and popular concerns.

National Trends

According to a recent report by Mintel, the vegetable retail market consists of two distinctly performing categories—fresh and processed. Many value-added vegetable products fall into the processed category, including canned or bottled, frozen or dried vegetables. In 2010 the total U.S. retail sales of processed vegetables was $10.4 billion, which represented a steady growth rate of about 4 percent since 2005. The U.S. processed vegetable segment is expected to grow to about $12.3 billion by 2015.

Some of the interesting trends for 2012 include the continued popularity of bagged salads and the approach of marketing carrots as a snack food. People between the ages of 47 and 65, baby boomers, typically have higher incomes and buying power and are the biggest vegetable eaters among all consumers. However, when it comes to vegetables that are pre-cut, consumers between the ages of 18 and 24, millennials, are the most likely buyers. Consumers who are most likely to exceed the recommended consumption of 2.5 cups of vegetables per day are women, those with annual household earnings of at least $75,000 and those living in suburban areas.

Natural and Organic Food and Beverage Trends

Despite adverse economic conditions, the natural and organic food and beverage market grew by about 20 percent between 2009 and 2011, with particular standouts in the sales of natural products which outpaced sales of organic products. The continued growth of all-natural products versus organics can be attributed to consumers trading down from organic, which tends to be more expensive. It is anticipated that even financial hardship will not affect loyal consumers of these products, with only one-in-four saying that they have cut back because of the downturn.

Going forward, the next two years are expected to be even better than the last, with annual growth expected to reach 11.5 percent, with most of the growth in this area driven by natural products. This category continues to benefit by increased consumer awareness of healthy food selections, with most purchases driven by health-related concerns. The demand for local food is due to this segment—with many of these consumers shopping at farmers markets, which continues to increase at a rapid pace. The total number of farmers markets in the U.S. grew by 17 percent between 2010 and 2011 and 246 percent between 2000 and 2011. These markets typically feature small, artisanal companies, many of which offer both natural and organic foods.

Continuing Trends

Industry research shows that nearly half of consumers who cook at least occasionally are cooking at home to save money. This new focus is due primarily to shifts in attitude resulting from economic conditions as spending indulgences continue to be less optional when making ends meet. Another motivation for cooking at home is health concerns; consumers are hoping to improve the health and nutrition benefits of the food they prepare. Farmers markets tie into these trends as well—many home cooks indicate that they are increasingly shopping at farmers markets, particularly for produce.

Green and sustainability initiatives remain a key part of consumer and agribusiness activities. Terms such as fresh and local are both effective in marketing, while foods considered hand-crafted have seen recent growth. Other booming areas include categories such as grass-fed, antibiotic-free and vegetarian-fed, which show that consumers are searching for source-verified and humanely raised animal foods.

These factors are creating new and exciting opportunities for agribusiness firms in the food sector and demand for local foods. There is a continued demand for small-scale protein processing facilities across the state as consumers, restaurants and institutions are looking for locally sourced proteins.

This demand combined with the desire for local produce provides small-food processors and entrepreneurs a new, growing market for innovative, high-quality or locally produced food products. Not only are individual agribusiness firms the beneficiary of these opportunities, but this success can filter out to other sectors of the economy as well. As we are reminded in a recent study by the USDA Economic Research Service, “Local food sales have the potential for community economic development.”
Agritourism

Dr. Kent Wolfe (kwolfe@uga.edu), CAES Center for Agribusiness and Economic Development

The 2010 Farm Gate Report estimates that agritourism and nature-based tourism generated $75 million dollars, down slightly from 2009. With continued economic uncertainty, agritourism is poised for continued growth in 2012. This growth is in part boosted by consumer’s interest in local foods and the desire to know where their food is grown. The local-food movement provides a channel to get people to farms and participate in agritourism activities.

The trend for people—especially families—to take short excursions continues to be popular given the expenses associated with more traditional activities and vacation destinations. Visiting an agritourism venue is a way for a family to spend quality time making memories together and enjoying each other’s company.

Operators are continuously updating their operations to incorporate new activities and events. Venues such as wineries, working dairies, hayrides, corn mazes, pick-your-own farms, hunting and fishing and farm tours offer an inexpensive outing that offers activities for the entire family. The wide appeal of agritourism continues to draw Georgians and others visiting the state to the farm, and the industry is set to grow in 2012.

Leisure Travelers

Stagnation or slow growth in both job creation and wages combined with higher fuel prices, hotel prices and airfare are expected to persist in 2012. These issues will lead to moderate travel growth overall. However, leisure travel appears to be rebounding despite the economic uncertainty as people are planning to travel more in 2012 than in 2011. Industry research reveals that 36 percent of leisure travelers interviewed plan to spend more money in 2012 than in 2011. The U.S. Travel Association forecasts domestic leisure travel will also increase by 1.5 percent in 2012 with people taking an average of 2.2 trips—up 1.8 percent over last year. Leisure travel trends in 2012 will include a renewed interest in cultural trips as people seek to combine precious downtime with enriching experiences.

School Field Trips

Local governments and counties are struggling with their budgets as falling house and property values have reduced tax revenues. Since a large portion of a community’s budget is devoted to education, school systems across the state are facing reduced budgets in 2012. As a result, many communities may no longer provide school field trips as a means of reducing cost cutting. The reduction in school field-trip budgets will have a significant impact on agritourism operations as many operators across the state rely on school field trips to generate awareness, traffic and revenue. School tours accounted for 1 percent of the revenue generated in agritourism in 2010, falling from 1.2 percent in 2009 and 2 percent in 2008. The need to reduce school costs will again limit the number of field trips in 2012, negatively impacting agritourism across the state.

There are three primary economic factors that will impact agritourism and nature-based tourism in Georgia in 2012:

1. Fuel Prices. Increased fuel prices will create an additional burden on strained school budgets which could result in even fewer school field trips. According to the Energy Information Administration, the average price of regular gasoline is expected to rise to $3.43 per gallon in 2012, up from an average of $2.97 in 2011. Therefore, fuel prices have the potential to be a limiting factor in a school system’s decision to take field trips.

2. Tax Revenue. Georgia is expected to experience an increase in tax revenues, and both GDP and personal income are expected to rise in 2011. However, 2012 fiscal year state budget projections suggest that the state’s K-12 budget will remain unchanged. Unless the economic situation improves significantly and generates larger tax revenues, school field trips will be negatively impacted resulting in an adverse effect for a number of agritourism operations across the state.

3. Unemployment. The economy appears to be improving, but Georgia’s unemployment rate is still high at 10.2 percent. Employment in nonconstruction and related industries appears to be increasing, but slowly. On an annual average basis total nonfarm employment will increase by 1 percent in 2012, which will be only slightly higher than the 0.8 percent gain estimated for 2011. The unemployment rate is expected to fall in 2012 driven by increased export demand and limited growth in domestic demand, which has the potential to positively impact agritourism.

Emerging Issue

The most important emerging issue facing agritourism operators has not changed over the past year: The potential of being reclassified from agricultural to commercial. As local governments look for additional revenue, there is pressure to reclassify agritourism operations as commercial in order to significantly increase their tax liability.

In conclusion, Georgia agritourism and nature-based tourism is poised for a year of moderate growth as leisure travelers increase their travel plans despite rising fuel costs combined with significant growth in the local-food movement, which will draw people to farms. However, the growth in these areas will be tempered by an anticipated fall in school field trips.
Locally Grown, Organic and Natural Foods

Dr. Tommie Shepherd (ttshep@uga.edu), CAES Center for Agribusiness and Economic Development and Julia Gaskin (jgaskin@engr.uga.edu), CAES Department of Biological and Agricultural Engineering

Consumer’s interest in locally grown foods continues to grow. The USDA now estimates that the locally grown food market in the U.S. is a $4.8 billion dollar industry. As producers realize there is a market for locally produced, processed and distributed products, they have increased their production. According to government research, the number of producers that market their products directly to consumers (individuals, farmers markets, roadside stands, retailers, institutions, food services and restaurants) has grown significantly over the past decade, rising from 86,000 producers in the 1990s to an estimated 136,000.

It appears that the majority of the growth in local foods is accruing in the produce industry. According to research, approximately 5 percent of U.S. farmers sell their products to consumers directly or through roadside stands, farmers markets, grocers and restaurants. However, when examining vegetable, fruit and nut farms the figure rises to 40 percent. This figure is expected to grow as consumers continue to demand more locally grown produce and the Georgia Department of Agriculture’s revamps and promotes the Georgia Grown program.

Value Added
There is a demand for locally grown protein products in Georgia, but there is a set back with processing. Currently, Georgia’s livestock industry is geared towards large-scale production. As a result, there is little capacity for smaller producers to produce niche products under USDA’s inspection service leaving the locally grown protein industry to grow at a slower rate than produce. The demand for locally grown protein products is expected to continue in 2012.

Establishing local-food related businesses that offer some form of further processing, packaging, distribution or other value-added activities will continue to prove much more difficult due to the greater capital requirements and regulatory burdens. Small producers often lack the start-up funding and volume of product necessary to achieve sufficient economies of scale to obtain a toehold in the value-added arena. The recently passed federal Food Safety and Modernization Act will add to these difficulties as its concepts are translated into formal regulatory language. Despite these challenges, the future of local foods in Georgia remains bright, as local producers continue to search for workable models of production, processing and distribution of their products.

Reaching Consumers
One potential solution to developing infrastructure for small to midscale producers that are too small to access wholesale markets through traditional channels is a “food hub.” A food hub provides a physical place where produce or meat products can be brought together in quantities that are useful for institutional and/or wholesale markets, so that small and midscale farmers can access new markets. They can also serve to distribute and sometimes process products. The USDA Agricultural Marketing Service defines a food hub as, “A centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution and/or marketing of locally/regionally produced food products.” A key feature of food hubs is that food is source identified, i.e., the consumer knows the farm from which the food originates. This aids in tapping the interest in local food.

There are several different models throughout the U.S. In the Southeast, there are several food hubs that began as nonprofit organizations. There are cooperatives that begin as a nonprofit and are now self-sustaining. There are also examples of private companies or farms that aggregate products from producers to serve a niche market. These typically have agreed upon common production practices.

Food hubs appear to be economically viable. Recent research by the USDA AMS indicates that of 20 food hubs in existence for several years, 10 were profitable or broke even. Seven other food hubs projected they would break even within two to three years.

One of the most rapidly growing avenues for marketing locally produced foods in Georgia is through local farmers markets. Many cities, small towns and communities throughout Georgia have a keen interest in developing farmers markets as an economic development tool. Local markets not only provide a low-cost and low-risk means of supporting local growers with out incurring significant capital expenditures, but also help to build consumer awareness of other local merchants. Local farmers markets have the additional advantage of being easily opened and closed in conjunction with local growing seasons without incurring major start-up and closing costs.

Organics
Certified organic or certified naturally grown produce is an important niche within the local-food market. Organic produce sales have continued to grow even under tough economic conditions. Currently, there appears to be more demand than supply for local, organic produce. It is estimated that U.S. sales of organic food account for 3.7 percent of total food sales with fruits and vegetables having the greatest impact. Produce accounts for nearly 40 percent of all organic food sales and over 11 percent of total U.S. fruit and vegetable sales. Just over half of organic foods are sold through mainstream food retail outlets.
The Georgia fruit and vegetable sector has grown from $600 million to $1.1 billion in the past decade. Although five of the eight commodity groups in Georgia experienced decreases in farm gate value in 2009, the fruit and nuts industry exhibited the highest growth rate in terms of percentage gain (36.8 percent). The two fruit crops responsible for this exponential growth were pecans and blueberries with 35.8 percent increase and 68.2 percent increase in farm gate values, respectively. Fresh produce, however, require a large amount of human resources for harvesting, as most are hand-picked, and timely packaging since they are perishable.

Even though this growth is expected to continue into 2012, one of the major problems facing the dynamic Georgia fruit and vegetable industry is the new immigration law known as H.B. 87, which Governor Nathan Deal enacted into law on May 13, 2011. The Georgia legislators did not succumb to the fierce pressure mounted by the Georgia Fruit and Vegetable Grower’s Association to block this law from passing. This new law penalizes transporters and harbormen of illegal immigrants and provides police officers the right to investigate the status of suspected immigrants without identification. It also requires growers to utilize E-Verification prior to hiring any workers.

Reports in Georgia show that labor shortages are up by almost 50 percent. This shortage could translate to over $300 million in combined fruit and vegetable crop losses, or $100 million for the fruit and nuts industry alone, if no corrective measures are implemented to minimize this expected loss.

A recent study conducted for seven primary spring crops (blueberries, blackberries, watermelon, cucumbers, bell peppers, squash and onions) by the University of Georgia Center for Agribusiness and Economic Development revealed a total loss related to labor shortages of $75 million. However, if the report was representative of the entire Georgia fruit and vegetable industry, the economic loss due to labor would swell to about $391 million, equivalent to 3,260 jobs, according to the report.

Another study by the Farm Bureau revealed that the U.S. agricultural sector risks losing $5 billion-$9 billion in annual production if labor shortage issues are not addressed in a timely manner. An earlier study conducted in 2007 by UGA ag economists showed that even though food preparation pays less ($6.64/hr.) than farm labor ($9.50/hr.), it has been an uphill battle to convince the food preparation labor force to switch to farm labor despite the higher wage. The reason given was that it is less strenuous and more comfortable to be engaged in the food preparation industry than in farm work. As a result, Americans preferred the former to the latter.

H-2A and other programs aimed at buffering the labor shortage problems are too bureaucratic, expensive, inclusive and fail to attract grower participation. However, hired migrant farm labor has been a major contributor to U.S. agriculture, especially the vegetable and fruit sector. The earlier and more tactfully policy makers address this issue, the better, as the impact in both production and income loss to the economy is substantial. ■
Georgia’s Farm Labor

Dr. Cesar L. Escalante (cescalan@uga.edu) and Dr. Forrest Stegelin (stegelin@uga.edu), CAES Department of Agricultural and Applied Economics

Nearly everyone remembers Ray Charles singing, “Just an old sweet song keeps Georgia on my mind.” However, the impact of the Georgia E-Verify mandate and accompanying employer and immigrant sanctions and liability were anything but sweet for Georgia’s agriculture and agribusiness industry in 2011. Georgia is not alone as at least 12 other states have passed similar legislation, with another dozen scheduled to take up the issue during the winter of 2011-2012. The federal government is also proposing a mandatory E-Verify bill of its own—H.R. 2164, the Legal Workforce Act, which is currently referred to the House Subcommittee on Social Security. The common denominator, for agriculture and agribusiness, for all of this legislation is that none of the states have taken time to adequately recognize the importance of agricultural employment and write in workable solutions, according to the National Council of Agricultural Employers.

Last spring, Georgia passed H.B. 87, which requires employers to use E-Verify to confirm the legal status of employees. In the process, the traditional pool of migrant farm workers were frightened so badly that most avoided the state in droves. This hit Georgia’s labor-intensive food and environmental horticulture industries mostly by surprise because many did not believe the bill would pass, and when it did pass it would not take effect until July 1. However, workers stopped coming to the state as soon as passage of the bill was announced.

The situation regarding E-Verify has put the agriculture and agribusiness industry between a rock and a hard place. The industry is dependent on undocumented laborers on the production and harvesting of food crops, such as fruits and vegetables, as well as the production, installation and maintenance of environmental horticulture crops, such as landscape installation and lawn care services. Even the restaurant industry, an important food-related employer, depends on undocumented workers as do the entertainment, lodging and construction industries. Requiring that all employees be vetted through the E-Verify system would therefore leave the agriculture industry without sufficient workers to get the crops to market and would impact sales through all marketing channels. However, these industries can’t very well become an advocate of illegal immigration activity and thus can’t oppose E-Verify. So the official position is that mandatory E-Verify is okay, provided that a guest-worker program simultaneously is put into place to provide a legal avenue for agriculture’s labor needs.

A full accounting of the losses suffered by farmers, packers, processors, shippers, brokers, landscapers and the local communities in Georgia is not yet complete. In mid-2011, the Georgia Agribusiness Council released its estimate of about $1 billion of value-added losses ($300 million in farm gate value) in spoiled and unharvested produce that could be incurred by the state’s farm sector. A statewide farm labor survey immediately corroborated that claim as about 11,000 farm jobs were found to be unfilled in the fruit and vegetable industry alone, according to the Georgia Fruit and Vegetable Grower’s Association. The Bureau of Labor Statistics reported an estimate of 11.9 percent national unemployment for farming, fishing and forestry occupations in July 2011, while Georgia’s overall July unemployment rate was 10.1 percent. Analysts attributed the farm-labor supply gap to the lack of seasonal farm workers that could withstand the demands and working conditions of certain taxing farm work paid on a piece-rate basis, not hourly wages or salaries.

While investing in innovation and adopting mechanization strategies is financially feasible for large agribusinesses and agricultural operations, smaller businesses have difficulty justifying and affording the necessary capital investments. Beyond 2011, the farm-labor supply gap can be remedied only if unemployed domestic residents would consider taking on the unfilled farm jobs and/or if policy makers would yield to a significant recasting of the H-2A program to make it a more viable alternative, especially for smaller farms.

Fewer Hispanics are coming to the U.S. to work, and we should expect that trend to continue. Reasons for the trend include stricter enforcement in the U.S. and on the border; the Mexican economy continues to grow, and people who came to Georgia for work are increasingly finding it possible to find employment back home (the unemployment rate in Mexico during July 2011 was almost half of that in the U.S. for

![Real Wage Rates, 1990-2010](image-url)
and finally, most temporary farm guest workers want to go home after the season is over and want to be home permanently when they retire from farm work.

A study conducted by the Center for Agricultural and Economic Development found that in order to cope with this situation, some farmers are contemplating decreasing their planted acreage in 2012, while others will attempt to increase mechanization of their operations as the shortage problem of seasonal farm labor is expected to persist.
This valuable guide is provided as a companion to the Ag Forecast 2012 seminar series.

For more information visit www.georgiaagforecast.com

or contact

**The Center for Agribusiness & Economic Development**
301 Lumpkin House
University of Georgia
Athens, GA 30602-7509
706.542.2434

**Department of Agricultural & Applied Economics**
301 Conner Hall
Athens, GA 30602-7509
706.542.2481