



2013 Georgia Ag Forecast

Farm to Port: Maximizing the global
impact of Georgia agriculture.



THE UNIVERSITY OF GEORGIA
COLLEGE OF AGRICULTURAL &
ENVIRONMENTAL SCIENCES

Introduction

From production to processing, agriculture is the single largest industry in Georgia. 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 and reduced resources, our Extension programs are doing more with less as they continue 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 continues to pull out of the recession.

With this in mind, we present the seventh annual Ag Forecast publication. The material presented here represents the best thinking of our economists who work with the various agribusiness industries in our state. This year we have added a special section from the Georgia Department of Economic Development on agricultural exports to complement our theme of Farm to Port.

Whether you're interested in the financial outlook of the U.S. and Georgia, in crops, livestock, biofuels, or agritourism, we'll show you the impacts from 2012 and discuss the economic potential that 2013 holds.

We thank our sponsors, Georgia Farm Bureau 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.

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Financial Outlook: U.S. and Georgia

Dr. Jeffrey M. Humphreys, Selig Center for Economic Growth, UGA Terry College of Business

United States

The 2013 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 2013 GDP growth will be very low—1.8 percent. With the rate of U.S. GDP growth below 2 percent, the economic recovery will still be vulnerable. The anemic rate of GDP growth reflects the expectation of tighter federal fiscal policy; reduced spending by many state and local governments; the lagged effects of the property bust; disciplined spending by consumers; and turmoil in the European Union. Also, there was very little momentum exiting 2012.

Uncertainty regarding the sustainability of the U.S. economic expansion—and the anxiety that goes along with it—will remain high in 2013. The risk of recession is 30 percent. Recession triggers include a major oil supply interruption due to political events in the Middle East or North Africa and a financial panic in the EU that precipitates a global financial crisis.

In 2013 private final domestic demand, rather than fiscal stimulus or net exports, will be the primary driver of U.S. GDP growth. Since fiscal policy will be quite restrictive, the Federal Reserve will be unusually supportive of growth in private demand by maintaining a monetary policy stance that is very stimulative—characterized by near zero short-term policy interest rates into 2015. The Federal Reserve has kept both deflation and another recession at bay, but the marginal benefits of each additional round of quantitative easing has diminished. That's partially because much of the new money created simply gets held as cash (or near cash equivalents) and does not get put to work in the economy.

Despite ample liquidity, the U.S. banking system is not completely fixed. We will continue to feel the aftershocks of the financial panic that seized up the credit markets in September 2008. Europe's banking and sovereign wealth problems are still far from having been

resolved. The historical correlation between U.S. GDP growth and EU GDP growth is extremely high, implying that a significant deepening of the ongoing recession in the EU will push the U.S. economy into recession.

GDP growth of our major trading partners will be slow in 2013, and the pace of import growth will be moderate. Net exports therefore will not contribute significantly to U.S. GDP growth in 2013.

A fundamental reason U.S. GDP growth will be subdued rather than vibrant is that we are going to see restraint in spending by U.S. consumers. People lack confidence in both the current and the future economic situation and therefore will remain very cautious in 2013. However, housing will make a positive contribution to U.S. GDP growth in 2013.

On an annual average basis, inflation-adjusted GDP will expand by 1.8 percent in 2013, which is far below the long-term trend rate of growth of approximately 2.6 percent (Table 1).

Meanwhile, the labor market is recovering much more slowly than production. It will be 2015 before the U.S. replaces the 8.8 million jobs lost during the period leading up to, during and in the immediate wake of the recession.

Consumer spending

Modest job creation coupled with a limited amount of wage and salary growth will help to slowly repair household balance sheets in 2013. However, the drag on consumer spending from still tight credit conditions and recent declines in households' net worth will be limiting factors. The gain in inflation-adjusted consumer spending

therefore will be about 1.9 percent, about the same as the estimate for 2012.

In 2013 consumers' inflation-adjusted spending for goods will increase much faster than spending for services, with spending for durable goods growing more than twice as fast as spending for nondurable goods. Spending on nondurables such as food, pharmaceuticals and other medical products will rise moderately, but spending for clothing and shoes will rise only slightly. Providers of public transportation, recreational services and financial services will see above average growth in spending.

Labor markets

On an annual average basis total nonfarm employment will increase by 1.3 percent in 2013, the same as the estimate for 2012. Companies will begin hiring as domestic demand for goods and services expands, but progress will be limited. Most businesses have shed their redundant staff and are very lean relative to their actual staffing needs, so the rate of job destruction in the private sector will be quite low. GDP growth will substantially outpace productivity growth in 2013, which will push firms to hire additional staff.

In 2013 other professional and business services companies will post the fastest rate of employment growth. Education, health services, the arts, entertainment, recreation, construction and information subsectors will see solid employment gains. In contrast, job losses will continue in the government sector, which is the only major economic sector expected to lose jobs in 2013.

Table 1. U.S. baseline forecast, 2008-2013.

Georgia	2008	2009	2010	2011	2012	2013
Gross Domestic Product, Bil of 2005 \$	13,161.9	12,757.9	13,063.0	13,299.1	13,578.4	13,822.8
Percent Change	-0.3	-3.1	2.4	1.8	2.1	1.8
Nonfarm Employment (Millions)	136.8	130.8	129.9	131.4	133.1	134.8
Percent Change	-0.6	-4.4	-0.7	1.1	1.3	1.3
Personal Income, Bil of 2005 \$	11,437.4	10,886.8	11,092.1	11,378.2	11,601.8	11,819.0
Percent Change	1.3	-4.8	1.9	2.6	2.0	1.9
Civilian Unemployment Rate (%)	5.8	9.3	9.6	8.9	8.4	8.2
CPI-U, Annual Percentage Change	-51.7	-48.5	-5.3	7.1	28.7	19.3

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

International trade

In 2013 both real exports and imports are expected to grow about twice as fast as U.S. GDP, reflecting the ongoing globalization of input and product markets. Since exports will rise only slightly faster than imports, the trade gap will not narrow appreciably in 2013. Hence, net exports will be an essentially neutral factor in terms of its contribution to U.S. GDP growth. The main obstacle to faster U.S. export growth in 2013 will be the economic and political turmoil in the Eurozone. China and many other emerging market countries also will grow more slowly than in recent years.

U.S. export growth will be broadly based in 2013, and increasingly, growth will be in emerging-market or commodity-based economies rather than in developed economies. With the exception of foods and beverages, increases are expected for all of the major categories of goods and services. Industrial materials, consumer goods and tourism will see more moderate gains. Exports of food will decline slightly, however.

U.S. dollar depreciation will not boost U.S. exports very much in 2013. That's because from a historical perspective the U.S. dollar's value is already quite low, and slight additional depreciation will not cause our exports to soar. The amount of U.S. dollar depreciation against emerging market currencies will be determined primarily by how quickly China allows its currency to appreciate. The U.S. dollar will remain strong against the euro, reflecting the Eurozone's debt problems.

Inflation

If oil prices remain relatively steady, consumer price inflation will increase by 1.5 percent in 2013, compared to 2 percent in 2012. Of course, inflation will be even lower should energy prices tumble, or should the economy experience a recession. The usual drivers of inflation will not be more intense in 2013 than in 2012. As long as the Federal Reserve does not keep rates too low for too long, the risk of stagflation remains low. Based on the forecast of lackluster—albeit sustained—U.S. GDP growth and a sluggish global

economy, the Federal Reserve will probably begin increasing short-term policy interest rates in the second quarter of 2015.

The outlook for inflation beyond 2014 is considerably less sanguine, however. The magnitude of recent fiscal and monetary stimuli increases the risk of inflation. The federal debt has skyrocketed in absolute terms as well as in terms of its percentage of GDP. That will create pressure to monetize the debt. Outsized budget deficits cannot be sustained for more than a few years without doing significant damage to the U.S. economy and its prospects for growth. Over the long term, keeping inflation in check means fully embracing sound federal fiscal policy.

Georgia

Considering that Georgia's economy has underperformed the U.S. economy for over a decade, it is encouraging to note that Georgia's 2.1 percent GDP growth rate in 2013 will be slightly higher than the 1.8 percent rate estimated for U.S. GDP. However, since this growth is barely above stall speed, the state's economy will be vulnerable to a major domestic policy mistake or a big shock.

Georgia's nominal personal income will grow by 3.6 percent in 2013, which also is slightly higher than the gain expected for the U.S. at 3.4 percent. Georgia's nonfarm employment will rise by 1.4 percent in 2013, which is about the same as the gain expected for the nation.

Georgia's slight edge over the U.S. economy in 2013 reflects several favorable developments. Reasons for the improving relative performance of Georgia's economy include the restructuring of the state's private sector and the fading of the real estate bubble. Aside from restructuring, the most important reason why Georgia

is poised to outperform the nation is that many of the large relocation and expansion projects announced will provide a tailwind to Georgia's economic growth in 2013. Examples include Caterpillar's plans to create 1,400 jobs in the Athens area, Baxter International's plans to create 1,500 jobs near Covington and State Farm Insurance's plans to create 500 jobs near Perimeter Mall.

Due to cost, logistics and tax advantages, Georgia remains very competitive with other states when it comes to landing many types of major economic development projects. That's partially because Georgia has made several strategic shifts in its economic development strategy, including the creation of a \$100 million deal-closing fund.

In 2013 Georgia's population will grow at a pace that exceeds the national average—1.3 percent for Georgia versus 0.9 percent. The higher rate of population growth reflects a rise in net migration to the state to about 61,000 people in 2013, up from only 29,000 in 2009. Prior to the recession, Georgia saw about 150,000 new net migrants each year. Another force that will help Georgia to match or exceed the pace of U.S. GDP growth in 2013 is the upturn in information jobs that began in mid-2012. Demand for smart phones, broadband, prepaid phones, tablets, e-readers and cloud computing will be the information industry's primary drivers.

Employment

The state's unemployment rate for 2013 will average 9 percent, or about 0.4 percentage points lower than rate estimated for 2012 (Table 2). The main reason the unemployment will remain high is the slow pace of economic growth, but it's also true that many of the new

Table 2. Georgia baseline forecast, 2008-2013.

Georgia	2008	2009	2010	2011	2012	2013
Real Gross State Product, Bil of 2005\$	373.9	350.6	359.6	365.8	373.1	381.0
Percent Change	-1.0	-6.2	2.6	1.7	2.0	2.1
Nonfarm Employment (Thousands)	4,102.2	3,880.9	3,842.7	3,880.0	3,917.4	3,970.5
Percent Change	-1.0	-5.4	-1.0	1.0	1.0	1.4
Personal Income, Bil of \$	340.8	327.6	337.5	354.4	368.2	381.4
Percent Change	3.1	-3.9	3.0	5.0	3.9	3.6
Housing Permits, Total	35,368	18,228	17,265	18,493	23,800	28,400
Percent Change	-51.7	-48.5	-5.3	7.1	28.7	19.3
Unemployment Rate (%)	6.3	9.8	10.2	9.8	9.4	9.0

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

U.S. and Georgia, cont'd.

jobs that businesses need to create do not match the skill sets of the unemployed. Of course, structural unemployment stemming from labor force immobility will diminish as housing markets improve. But structural unemployment due to a fundamental skills mismatch almost certainly will worsen due to deep cuts in state spending for technical colleges and the university system.

One underappreciated reason why job growth will continue to be slow is that the large wealth loss that accompanied the recession dramatically reduced the amount of funds available to launch or expand small businesses. It is new companies that typically create almost all net new jobs, and it is personal wealth—mostly in the form of equity, which is the primary source of funding for entrepreneurs who start new businesses, not credit.

Housing

The performance of Georgia's housing market will depend primarily on the performance of the labor market. New jobs, slightly bigger paychecks and slowly appreciating home values will give more people both the wherewithal and the confidence to buy homes. That will sustain the housing market's recovery.

Mortgage rates were at their lowest levels in 2012, but will remain very attractive through at least 2015. The stabilization of home values in most markets is causing credit conditions to ease. Low and perhaps overly conservative appraised values will continue to hold back conventional lending as well as housing turnover.

Another restraint on housing activity in 2013 is that about 36 percent of Georgia households with mortgages owe more on their mortgages than their homes are worth. Another 6 percent of Georgia homeowners with mortgages are in near negative equity situations. Thus, 42 percent of Georgia households with mortgages will not be able to absorb the transactions costs involved in selling their homes, much less make a significant down payment. These homeowners are essentially stuck in their current homes,

unable to trade up or trade down.

The restructuring of Georgia's private sector is complete, but much restructuring lies ahead for the public sector. State, local and federal government employment will decline for the remainder of the decade. Public sector restructuring constitutes the strongest remaining headwind for Georgia's economy.

Of all levels of government, state government has made the most progress in terms of adjusting its spending and staffing levels to reflect its ability to produce revenue. The biggest remaining challenge for state government is uncertainty regarding federal funding for mandated programs such as Medicaid. More full-time, state government positions will get replaced by part-timers, and changes in benefit and retirement plans will shift costs and risks from taxpayers to employees.

Similar to state government, local governments will struggle with less funding from the federal government. Many local governments will need to make additional cuts in 2013, 2014 and 2015. Future cuts could do a lot of damage depending upon what federal lawmakers decide to remove from the budget. For example, Georgia could get hit very hard if the federal cuts are skewed towards domestic military bases or the CDC (Centers for Disease Control).

In general, budgetary problems will lessen demand for business services that are purchased by government. Also, a significant reduction in both the range and the quantity of services provided by state and local governments should create new opportunities for businesses that provide similar services.

Goods producing industries outlook

Since peaking in mid-1999, Georgia has lost 272,000 jobs in goods producing industries, which includes manufacturing, construction, natural resources and mining. Fortunately, the purge is over. The state will add 7,600 good producing jobs in 2013: 6,000 manufacturing jobs and 1,600 construction jobs. Mining and logging

will neither add nor lose jobs.

In 2013 the job gains in construction will stem primarily from residential construction. In many jurisdictions, spending for publically funded structures will decrease, so it will not make a significant contribution to the growth of the state's GDP.

In Georgia industrial production will advance by about 2.5 percent in 2013, and manufacturing employment will rise by 1.7 percent. Production of durable goods will advance more quickly than production of nondurable goods, and production of business inputs and capital goods will grow faster than production of consumer goods. ■

Financial Outlook: U.S. and Georgia Farms

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The overall business environment and economic mood in 2012 still did not offer any clear indication of a definite, significant economic recovery in the short-term horizon. The Midwest drought, European economic instability, government spending cutbacks and the fear of a “fiscal cliff” upon expiration of the Bush tax cuts, among other factors, painted a gloomy picture of a sluggish economy that needs more time to rebound.

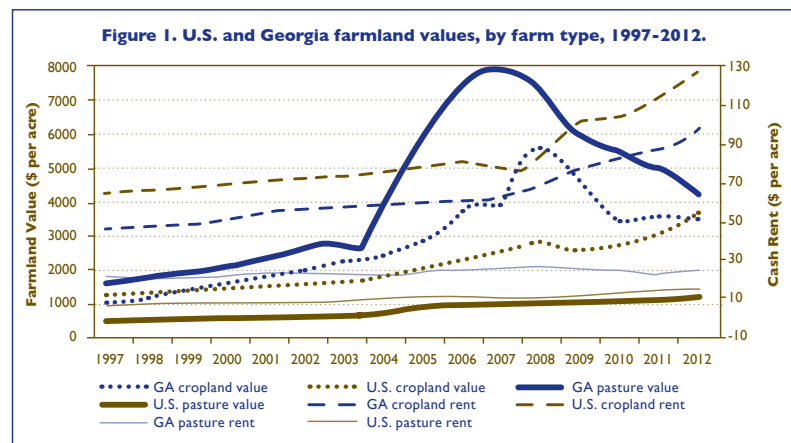
Under this backdrop, the U.S. farm sector continues to register growth and improvement in its financial conditions. According to the most recent report on trends in farmland values and cash rents across the country (National Agricultural Statistics Service, USDA), average farmland value increased by 10.9 percent from its 2011 value of \$2,390 per acre to \$2,650 in 2012.

National average values for cropland and pasture also increased in 2012 by 14.5 percent and 4.6 percent, respectively, over their 2011 levels. In contrast, Georgia’s average farmland value declined by 7.9 percent from \$3,800 in 2011 to \$3,500 in 2012. During the same period, average cropland and pasture values in Georgia also declined by 4.8 percent and 16 percent, respectively.

The cash rental market in Georgia, however, experienced more favorable conditions. The latest 12-month growth rates in average cash rents for cropland and pasture in Georgia of 13.29 percent and 4.35 percent, respectively, exceeded national growth rates for these farmland categories.

Georgia cropland and pasture values have been declining since 2008 and 2007, respectively, while national average values for these properties have been either increasing or nondecreasing (Figure 1). U.S. and Georgia cash rents for cropland have also been consistently registering higher growth rates since 2007.

The deviation between trends in farmland and agricultural use values can be explained by nonfarm influences.



Source: USDA-NASS.

Realized gains in cash rental rates in Georgia are indicative of favorable returns on agricultural activities in the state. However, farmland valuation depends on factors other than agricultural use considerations, such as the prevailing demand for real estate investments and prevailing credit market conditions, among others.

Prospects for a more favorable farm real estate market conditions in Georgia could, at least, be slightly boosted by recent developments in the lending front. According to latest 2012 data from the Senior Loan Officer Opinion Survey on Bank Lending Practices implemented by the Federal Reserve Board, there is at least a modest group of domestic banks that reported easing their lending standards. Meanwhile, a larger segment of the respondents reported stronger loan demand for most of their lending facilities.

The USDA Economic Research Service expects the national farm debt to increase by 2.7 percent to \$261 billion in 2012, mainly due to farmers’ stronger demand for non-real-estate loans to finance working capital and machinery investments. The latter is possibly a result of the increasing tendency of farms, especially the smaller ones, to mechanize more farm operations, especially those that used to rely heavily on seasonal farm labor where hiring difficulties have been reported by farms from certain

enterprises.

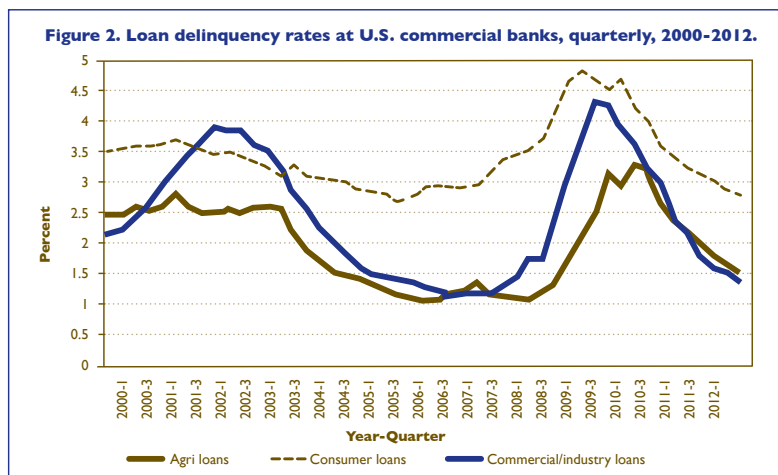
This specific credit demand may be expected to persist through 2013 and beyond. Farm lenders have generally preferred accommodating loans with variable interest rates and shorter maturities. Meanwhile, more farm operators, especially those with smaller farms, have financed their business needs on cash basis. Overall, the farm sector continues to record further improvements in its solvency position as debt-asset ratio improves to 10.2 percent in 2012 from 10.7 percent in 2011—a trend that is expected to continue in 2013.

Meanwhile, agricultural banks have fared considerably well in 2012 and will continue to perform well in 2013. Agricultural banks under the jurisdiction of the Atlanta Federal Reserve Board posted improving loan-deposit ratios that dropped to 0.70 in 2012 after reaching 0.82 in 2008, which is consistent with the national trend.

Overall, the banking industry has experienced a significant slowdown in bank failures as only 47 banks closed down as of the end of October 2012—registering a consistent downward trend from 92 failures in 2011 and from the record-number 157 failures registered in 2010. Nine of the 2012 failed banks operated in Georgia, while only one agricultural bank failed as of the second quarter of 2012.

U.S. and Georgia Farms, cont'd.

Commercial banks' experience with their agricultural clients continues to be favorable as agricultural loan accounts continue to register one of the lowest delinquency rates in relation to other loan categories. Farm borrowers have been one of the least delinquent borrowers over many years, even under the recessionary period (Figure 2). Given the expectation for interest rates to remain low during 2013 and the farm sector's favorable leverage and borrowing record, prospects are good for the agricultural lending industry in 2013. ■



Inputs: Agricultural Inputs and Production Expenditures

Dr. Forrest Stegelin Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

Of special interest to Georgia's agricultural producers purchasing production inputs in 2013 is the Georgia Agricultural Tax Exemption program. GATE is a new program created by Georgia House Bill 386, which offers qualified agriculture producers a sales tax exemption on related equipment and production inputs. This program will replace the Agricultural Certificate of Exemption (ST-A1) form, effective Jan. 1, 2013. Producers must apply to the Georgia Department of Agriculture either online or by mail.

H.B. 386 updates and modernizes the Georgia tax codes allowing agribusinesses to become more competitive with those in surrounding states. H.B. 386 specifically broadens the sales tax exemptions to include inputs that were previously not exempt. The bill also includes a phased-in, broad-based sales tax exemption on all energy used in agricultural related manufacturing.

Many of the newer varieties of crops are gaining attention from farmers as producers contemplate reversing the trend toward genetically engineered crops. For example, in Georgia, producers are going

back to the old and established, standard varieties of cotton, soybeans, corn and wheat. Reasons cited include improved effectiveness of minimum tillage practices and pre-emergence pesticides; questions about the yield expectations; new product acceptance and performance; reduced seed costs; and the higher opportunity costs of switching to GMO varieties, such as global trade compliance with World Trade Organization directives.

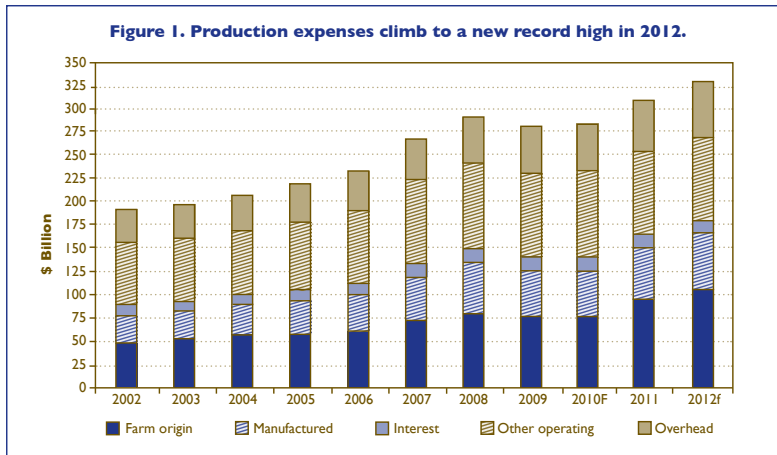
Georgia's farmers, ranchers and growers have experienced gains in land and labor productivity over the decades due to intensified use of agricultural inputs such as seeds, breed selections, custom fertilizers, equipment, custom feeds and irrigation water.

Total factor productivity (TFP) provides a broader concept of agricultural productivity than measures that compare output to just one input, like land or labor. To estimate TFP, economists total the land, labor and capital inputs (which does not come with standardized instructions) with material inputs used. Then they compare growth in total inputs with growth in total output of crop and

livestock products. If total output grows faster than total inputs, total factor productivity (where factor means input) has improved.

Therefore, TFP encompasses the average productivity of all inputs employed in the production of all crop and livestock commodities. Total factor productivity, however, does not account for agriculture's effect on the environment, such as nutrient runoff into water bodies or greenhouse gas emissions.

As for specific production inputs, and the 2013 outlook, a brief historical overview is needed. The value of production expenses is expected to have reached a new record high in 2012, as production expenses have risen annually in the past decade (Figure 1). The biggest rise in expenses has been increases in input prices. The prices-paid index for Production Items, Interest, Taxes and Wage rates (PIITW), as calculated by the USDA National Agricultural Statistics Service, has risen 82 percent in 10 years. By comparison, the Producer Price Index (PPI) for finished goods rose 40 percent during the same timeframe.



Source: Economic Research Service, U.S.D.A. Data as of August 28, 2012

Forecasting production expenses is complicated due to the unique characteristics of agricultural production and marketing, such as seasonality, perishability, changing consumer tastes, preferences and incomes, weather volatility and risk.

For instance, in 2012 the widespread drought impacted crop production because most crops were already planted before the severity of the drought was established (i.e. sunk costs for seed, pre-emergence, fuel and labor as a normal volume of crop related inputs that had already been purchased). The drought effects curtailed some production and reduced or eliminated much of the harvesting expenses in the latter part of the year. By price rationing a reduced supply of grains, the price of feed for animals and poultry increased, and meat animals were marketed at lighter weights for lower prices. As farmers and ranchers wanted higher prices for their animals, a rise in the feed prices-paid index and the number of grain-consuming animals left on the farm resulted.

The major crop-related expenses are predicted to rise nearly 10 percent for the

2013 calendar year, much less than in 2011 and even less than forecasted for 2012 a year ago (before the drought effects were realized). The principal reason for the slowdown is a smaller increase in fertilizer expenses (not price). Even so, expenses for fertilizer, pesticides and seeds are slated to rise because total planted acreages are up. This will especially be true for the heavy users of the mentioned inputs—corn, cotton and soybean producers (Figure 2).

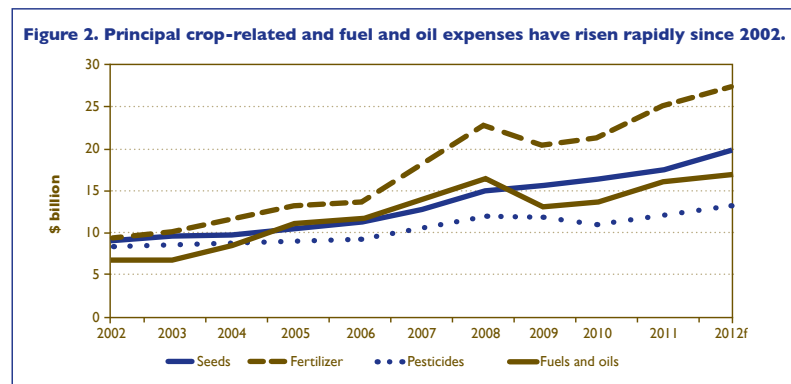
The slowdown in the rise of fuel and oil prices is as striking as fertilizer price trends, compared to the double-digit increases in the average prices-paid index

for fuels and oils observed each year between 2003 and 2011. The brakes to the rapid increases were applied in 2012 as a result of a 2 percent hike in Refiner Acquisition Cost (RAC).

Total labor expenses are forecast to fall in 2012 due to a small increase in wage rates combined with an expected decrease in total production output in vegetable, fruit, nut, greenhouse and nursery crops.

The inputs outlook for 2013 is heavily tied to the planting intentions expressed by farmers and growers. There will still be steady to modest price increases for most manufactured inputs, especially seeds, fertilizers, chemicals and farm machinery. Farmers will pay more (7 to 10 percent) for the seed they'll plant in 2013, depending on whether it is a conventional or a biotech variety, but they also will likely see higher returns on their investment. In Georgia the dilemma is related to the substitutability and switching that occurs between crops like peanuts and corn; surplus crops mean lower prices, which lead to switching enterprises.

The economics at current prices for fall harvest of 2013 are very good despite the higher cost of seed and some other inputs. This may lead to a good opportunity for profits, assuming no weather volatility. ■



Source: Economic Research Service, U.S.D.A. Data as of August 28, 2012.

Crops: Row Crop Net Returns

Amanda Smith, Dr. Nathan Smith and Dr. Don Shurley, Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

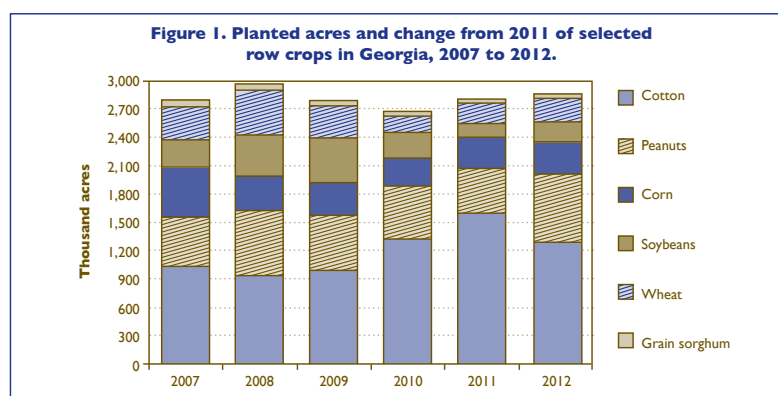
As of November 2012, commodity prices for the major row crops grown in Georgia are mixed compared to the same time of 2011. Peanut prices are down significantly due to a surplus resulting from record yields and higher planted acres. Corn prices are up because of the drought in the Midwest over the past summer and sustained demand. Soybean and wheat prices are also up. Cotton prices have declined due to weak demand and large global supplies. 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 2013.

Producers base their planting decisions on expected price, input costs, historical and projected yield, crop rotation, availability of credit and weather expectations. Risk management tools, such as crop insurance, are also part of the decision process.

Figure 1 shows the planted acres for select row crops in Georgia from 2007 through 2012. Producers' planting decisions in 2012 resulted in an acreage shift away from cotton primarily into peanuts. Georgia producers decreased planted cotton by 310,000 acres, while peanut acres increased by 258,000. Georgia producers planted more of their acres with soybeans (up 65,000 acres), wheat (up 38,000 acres) and grain sorghum (up 6,000 acres) than they did in 2011. The number of acres planted to corn remained stable between 2011 and 2012.

Table 1 is a preliminary estimate of how net returns are likely to compare for Georgia row crops in 2013. Both nonirrigated and irrigated expected prices, yields, income, costs and net returns are shown for comparison. Expected yields and variable costs are based on adjustments made to the 2012 UGA enterprise budgets for corn, cotton, grain sorghum, peanuts, soybeans and wheat. The UGA Enterprise Budgets and Crop Comparison Tool may be accessed online at www.ces.uga.edu/Agriculture/agecon/agecon.html or by contacting your local Cooperative Extension agent. The 2013 budgets are still under revision as this article is being written, but will be available online at the link above.

Budget estimates should be used as a



Source: U.S.D.A., National Agricultural Statistics Service

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 are also included in Table 1 for producers to consider when making a pricing decision. 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 in each table). The breakeven 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 of the table. The expected prices are estimates based upon current conditions (November 2012) and expectations for early

2013. 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 nonirrigated production appear to favor corn followed by cotton and soybeans. However, yield uncertainty on nonirrigated corn makes production more risky. Irrigated production appears to favor corn, soybeans and cotton. Corn acres are likely to increase on irrigated land. Cotton acres are likely to decrease or remain about the same as in 2012. Peanut acres are likely to decrease in 2013. Soybean and wheat acres are expected to increase compared to 2012. Grain sorghum acres are likely to remain the same. ■

Table 1. Per acre net return above variable cost, breakeven price and yield.							
Non-Irrigated Production							
	Expected Avg. Price ¹	Expected Yield	Income	Variable Costs ²	Net Return ³	Breakeven Price ⁴	Breakeven Yield ¹
Corn	\$6.25/bu	85 bu	\$531	\$335	\$196	\$3.94/bu	54 bu
Cotton	\$0.76/lb	750 lbs	\$570	\$427	\$143	\$0.57/lb	561 lbs
Grain Sorghum	\$5.75/bu	65 bu	\$374	\$254	\$120	\$3.91/bu	44 bu
Peanuts	\$400/ton	2,900 lbs	\$580	\$546	\$34	\$376/ton	2,729 lbs
Soybeans	\$12.50/bu	30 bu	\$375	\$255	\$120	\$8.50/bu	20 bu
Conventional Wheat	\$8.00/bu	55 bu	\$440	\$217	\$223	\$3.95/bu	27 bu
Intensively Managed Wheat	\$8.00/bu	75 bu	\$600	\$343	\$257	\$4.57/bu	43 bu
Irrigated Production							
Corn	\$6.25/bu	200 bu	\$1,250	\$677	\$573	\$3.38/bu	108 bu
Cotton	\$0.76/lb	1,200 lbs	\$912	\$553	\$359	\$0.46/lb	727 lbs
Grain Sorghum	\$5.75/bu	100 bu	\$575	\$378	\$197	\$3.78/bu	66 bu
Peanuts	\$400/ton	4,200 lbs	\$840	\$656	\$184	\$313/ton	3,282 lbs
Soybeans	\$12.50/bu	60 bu	\$750	\$374	\$376	\$6.23/bu	30 bu

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/Excludes hand weeding, 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%.

Crops: Peanuts

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Instead of worrying about planting too many acres of peanuts, the concern may be planting too few acres in 2013. A record large peanut crop in Georgia and the U.S. more than filled the peanut pipeline in 2012. As a result, prices have fallen to 2009–10 levels and will be slow to rise as the surplus is worked down.

A couple things stand out about 2012 for peanuts. First, planting started early and many more acres were planted ahead of pace. Second, crop conditions were better than normal leading to record yields. Georgia growers planted 260,000 more acres in 2012 for a total of 735,000 acres, up 55 percent from 2011. U.S. growers increased planted acres by 43 percent up to 1.64 million acres in 2012.

Total peanut production for 2012 is pegged at 3.23 million tons, a 77 percent increase and is better than the previous record of 2.58 million tons set in 2008. The USDA National Agricultural Statistics Service estimates the 2012 U.S. average yield set a record at 4,058 pounds per acre. The yield potential of new peanut varieties was evident as conditions were favorable for big crops in nonirrigated and irrigated fields.

Regionally, the Southeast (Alabama, Florida, Georgia, Mississippi) averaged 4,165 pounds per acre, the Southwest (New Mexico, Oklahoma, Texas) averaged 3,751 pounds and the Virginia-Carolina region (North Carolina, South Carolina,

Virginia) averaged 3,744 pounds. Georgia was the main driver, producing 50 percent of total production in the U.S. on 45 percent of the acreage.

The quality of the 2012 crop should be better with high grades and a return to normal levels of Seg 2 and Seg 3 peanuts. With the large crop, blanchers will still be full, but shelling costs should be back to normal.

The factor that weighed heavy on the market in 2011–12 was a short supply. This year the situation is reverse, with too many peanuts. Total peanut supply for the 2012–13 marketing year will jump from 2.72 million to 3.77 million tons due to 2011 carryover stocks, 2012's large harvest and an increase in imports.

While total supply was increased in response to higher peanut prices for 2011–12, total consumption also adjusted to the high prices, but in a negative way. Total disappearance of peanuts for the marketing year ending July 31, 2012 was down 2.4 percent. Peanut and peanut butter prices at the retail level rose to slow demand, and as a result, domestic consumption dropped 1.2 percent.

Per capita consumption had been increasing and was reflected in the strong domestic food consumption growth of 7.7 percent in 2011. Snack, candy and peanut butter use of shelled edibles ended the 2011–12 marketing year flat to slightly negative.

Forecast for 2013

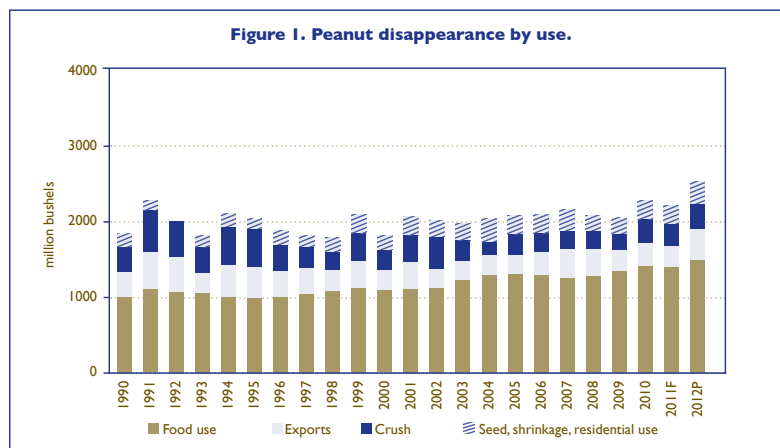
Due to a large supply, consumption should rebound in 2013 for the following reasons: Shelled prices have dropped in half compared to December 2011; peanut butter promotions have been introduced to help grow consumption; high feed prices will keep meat prices high in 2013; and growth in domestic food use should rebound by at least 7 percent.

Peanut crush is mainly a byproduct of peanut production where nonedible grades are crushed to produce peanut oil and meal. In 2012 crush was up to 300,000 tons due to quality losses in 2011. However, the domestic demand for peanut oil is actually greater than what is produced, so the number of peanuts crushed for oil will continue to rise in 2013. The forecast is for crush to reach 330,000 tons.

Seed and residual is also projected to increase nearly 25 percent to 294,000 tons. Acreage will decrease, but the residual use will more than offset the loss in seed supply. Exports are projected to have the largest increase, 45 percent more than in 2012. This will be key in working down the surplus.

Adding up the major categories of use gives a total consumption of peanuts for the 2012–13 marketing year at 2.53 million tons (Figure 1). If realized, this would be a total increase of 14 percent. This is compared to a 39 percent increase in total supply, which gives projected carryover stocks to be 1.24 million tons in 2013 (six-months of supply). Shelling plants may not be finished shelling the 2012 crop before the 2013 harvest begins.

Supply was the key to 2012's prices. However, demand will be the key for 2013 in order to work down the large supply. The start of the 2013 season will look more like 2009 as far as prices go. Peanut prices following a large 2008 crop dropped to \$375 per ton for 2009 spring contracts. Shelled prices traded in the 40-cent range until late 2010 when it became evident that the 2010 crop was going to be short. While acreage needs to be reduced,



Source: Oil Crops Outlook, Economic Research Service, USDA.

Peanuts, cont'd.

	USDA			3520 lb yield	3520 lb yield	3650 lb yield	3650 lb yield
	2010/11	2011/12	2012/13	1.25 mil acres	1.1 mil acres	1.25 mil acres	1.1 mil acres
	1,000 tons						
Beginning stocks	915	758	502	1,244	1,244	1,244	1,244
Production	2,079	1,830	3,235	2,200	1,936	2,281	2,008
Total supply	3,025	2,715	3,771	3,479	3,215	3,560	3,286
Total SSE	2,267	2,213	2,528	2,528	2,528	2,528	2,528
Soybeans	2,267	2,213	\$375	\$255	\$120	\$8.50/bu	20 bu
Ending stocks	758	502	1,244	951	687	1,032	759

the industry will want to insure enough acres are planted to prevent another year like 2011.

Contracts offered to growers will take into account where cotton and corn prices are headed. Soybeans could also be a player in 2013. Thus, the price offered to growers will not exceed returns of cotton, corn and soybeans. The 2013 season will likely see planted acreage drop to between 1.1 million and 1.2 million acres.

Table 1 shows projections for 2013 peanut supply and demand. The projections are preliminary but give a couple scenarios of acreage and yield. The main assumption is that food consumption

will increase by 7 percent and exports will increase by 45 percent in 2013. This is necessary to work down the carryover. A projected yield of 3,520 pounds per acre is given based on 22-year trend. Given the jump in yields the last three years, a 3,600 pound average yield is also used.

Assuming a 24 percent decrease in planted acres to 1.25 million and a normal abandonment rate, growers would produce a 2.2 million ton crop at 3,520 pound expected yield. Total use is projected to grow at a strong rate of 14 percent, leaving a carryover of 950,000 tons in July 2013. A drop to 1.1 million acres would result in a 1.94 million ton crop, and the higher use

projection would quickly drop carryover to under 700,000 tons. This would be positive for growers.

As mentioned earlier, 2013 price prospects for Georgia growers are not good. The best-case scenario would be if cotton prices all of a sudden took off, which is unlikely. Low acreage coupled with production problems would also raise prices. Growers will need to weigh the possibility of over planting peanuts without a contract in 2013 and the profitability of a \$355 price. The excellent yields of 2012 will be fresh on the mind, but should not be assumed to be repeated in 2013.

Prices for 2013 could see a wide range of volatility depending on how many acres are planted and whether the current dry weather pattern remains. An average price of \$450 per ton is needed to be competitive with cotton, corn and soybeans (using expected yields).

The question growers need to consider for 2013 is if they can afford to produce peanuts for loan rate at or below \$400 average, given the large supply. ■

Crops: Grains and Soybeans

Dr. Nathan B. Smith, Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences.

2012 recap

The 2012 crop season was a record for Georgia's major crops as corn set record yields and soybeans had a second best yield. Grain and soybean acres increased overall in Georgia, shifting out of cotton. Corn again led the way followed by wheat, soybeans and grain sorghum in planted acreage.

While drought conditions persisted in Georgia, timely rains allowed early planting and above-average crop conditions in 2012. Average prices were at record levels in 2011, and 2012 looks to break those again because of the Midwest drought.

Corn outlook

Georgia corn growers planted the same amount of acres in 2012 as 2011 at 345,000

acres. However, the 2012 harvest was improved from 2011 by 25,000 acres. The record average yield in Georgia increased from the previous record of 158 bushels to 190 bushels per acre. Total production in Georgia is estimated by the USDA National Agricultural Statistics Service at 56 million bushels of corn, an increase of 31 percent.

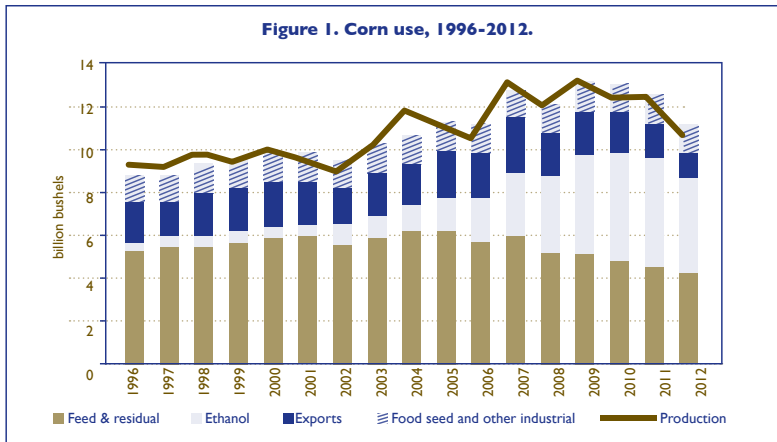
Estimating total use of corn in Georgia according to grain consuming animal units, the 2012 production represents about 20 percent of the total corn needed for livestock and poultry production in Georgia. About 70 percent of corn acres harvested were irrigated corn acres in Georgia.

Nationally, U.S. corn growers increased plantings again in 2012. The total planted

acres rose 5.5 percent to 96.95 million acres. The increase was expected to reverse a downward supply trend, but corn yields were reduced to 122.3 bushels per acre due to the major drought suffered in much of the Midwest.

Based on a harvested acreage of 87.7 million, total production for 2012 is estimated at a lowly 10.72 billion bushels. Production will fall short of total use of corn by 440 million bushels, dropping ending stocks to a recent low of 647 million bushels. All major categories of use are projected to fall by the end of the 2012-13 marketing year to 11.2 billion bushels (Figure 1).

The loss of the blender's tax credit, lower gasoline prices, and high corn prices have combined to push the profit



Source: The World Agricultural Supply and Demand Estimates Report, USDA, Dec. 11, 2012.

margin down for ethanol. Ethanol use is expected to fall from 5 billion bushels in 2011–12 to 4.5 bushels for 2012–13. Feed and residual use is expected to drop again, this time 13.5 percent to 4.13 billion bushels due to a shrinking livestock inventory.

Corn exports will fall as the price is high and the value of the dollar has strengthened against other currencies. Continuation of weakness in the dollar in the later part of 2012 could help boost exports, but exports are projected to fall by over a third to 1.15 billion bushels. Corn production in South America is expected to increase and take some of the U.S.'s export market share, but planting conditions may have delayed corn planting enough to reduce acres to less than projected.

While prices have fallen from their highs in 2012, the average season price for corn will be a record. The U.S. range is projected at \$6.80–8 per bushel for the 2012 crop, and Georgia should average over \$7 per bushel.

The corn basis for Georgia growers varies across the state depending on location and demand by local users. Preharvest basis can be 15 cents under to 50 cents over futures. Georgia growers' best opportunities to price 2013 corn was probably in the summer of 2012, but there should still be opportunities to sell corn in 2013.

The fundamentals of supply and demand still show a tight U.S. corn market. Until it is known that production is going to jump back above 13 billion bushels, prices should remain around \$6

for the new crop. Once support is broken at \$6, then \$5.75 and \$5.40 are likely targets for futures. Prices have supported planting corn, but are moving towards more soybeans.

A case can be made for corn acres to increase again in 2013 because of price or decrease in favor of rotation and drought conditions. I will venture to say they will likely remain the same or drop a little as regions shift crop mixes.

Wheat

After hitting a low in 2010, wheat production in Georgia has rebounded in 2011 and 2012. Planted acreage climbed again in 2012 to 290,000 acres. Seventy-nine percent of planted acres were taken to harvest in 2012. The average yield fell by 6 bushels per acre to 49 bushels. Total production was 11.27 million bushels in Georgia.

While production was not up by much, value of production was up due to higher prices just prior to harvest. Wheat prices reached \$9 per bushel in April and May before falling to \$1 in June.

Acreage for 2013 is expected to increase for the third year in a row due to a rally in prices. September prices were up again setting the base price for crop insurance at \$8.57 per bushel. Planting was challenged, however, by dry conditions, which were good for harvest of spring crops but not good for planting wheat. Still, wheat acreage ought to be above 300,000 acres, as late planting was made possible by eventual rains.

U.S. wheat acreage grew by 1.5 percent

in 2011–12 to 54.4 million acres, and it is estimated to be up by 2.4 percent for 2012–13. Harvested acres in the U.S. are expected to rebound to 2010 levels of 46.3 million acres after falling to 43.7 million in 2011. The overall situation for wheat in the U.S. is fairly stable but has recently made bearish moves as far as supply and demand is concerned. Ending stocks are not projected to increase. Price has stabilized in the \$8 range but has shown signs of weakening.

The 2013 outlook for wheat is for a few more acres to be planted and production to recover from drought last year. Spring wheat is projected to be down by some analysts. Demand is pretty stable as long as exports can hold up. Ending stocks are down slightly at 700 million bushels in the U.S., but soft red winter wheat makes up about 200 million bushels of the total. The only wheat class that can be considered tight is white winter wheat.

The main concern going into 2013 for wheat in the U.S. is the carryover effects of the drought. The World wheat situation is one that has seen a tightening in stocks due to production drop in major exporting countries. Use was up in 2012 due to more feed use, but it is expected to decline in 2013 (Figure 2). The major U.S. wheat production areas are still shown to be in extreme drought conditions as we end 2012.

Wheat prices have been constrained by corn and soybean prices. Direction of these prices will impact wheat prices in 2013. Prices to growers are still good but can go either way in 2013. A continuation of the drought in the Southern Plains will keep prices high, around \$8 per bushel. But a recovery in production in 2013 will drop prices down to below \$7 per bushel. Right now, the uncertainty of production is helping hold prices.

Soybeans

Georgia soybean production rebounded in 2012 as growers increased plantings from 155,000 acres to 210,000 acres. The second best state average for soybeans was realized in 2012, which helped push production up to 7.2 million bushels, a 142 percent increase over 2011. The average yield in Georgia rose from

Grains and Soybeans, cont'd.

22 bushels per acre to 35 bushels per acre. In the past eight years, Georgia's soybean acreage has fluctuated from a low of 155,000 acres to a high of 470,000 acres. The major swings in acreage are a result of the relative competitiveness of soybeans with other row crops. Soybean prices have strengthened due to U.S. and global shortfalls. Also, Georgia's soybean yields, while improving, are not as competitive with the Midwest. Local demand does give opportunity for soybeans because of the animal industry, but numbers for that industry have been down.

The U.S. soybean crop also suffered a shortfall due to the major drought in the Midwest. Planted acreage was up nearly 3 percent to 77.2 million acres, but the average U.S. yield dropped once again. The 2012 yield is projected to decrease 6 percent down to 39.3 bushels per acre. This is the lowest yield since 2003. Total production is estimated to be 2.97 billion bushels, down 4 percent from 2011-12. Total use has also declined with lower supplies.

Projected total use is pegged at 3.03 billion bushels, or a decline of 4 percent (Figure 3). Domestic crush is mainly responsible for the decline, falling to 1.57 billion bushels, down from 1.7 in 2011-12. Less feed demand is the main driver.

Exports are projected to remain about 1.35 billion bushels for the 2012-13 marketing year, as China has been the major buyer. Exports by the U.S. reflect a shift from South America due to production problems in 2011-12.

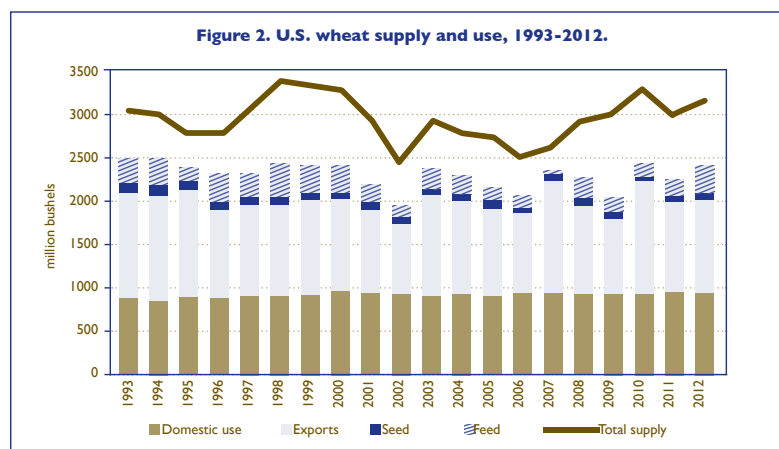
South America is expected to produce a large crop in 2013 and sales will shift back as their harvest begins. World stocks of soybeans are down at 56 million metric tons and are expected to grow slightly to 60 million metric tons.

Soybeans have the most bullish outlook of the row crops in 2013. After rallying in November to \$17 per bushel, soybean prices have traded sideways and then trended down \$2-2.50 per bushel in the futures market. Supplies will be increased, but until harvest is known for the South America beginning in February and the U.S. acreage is known in June,

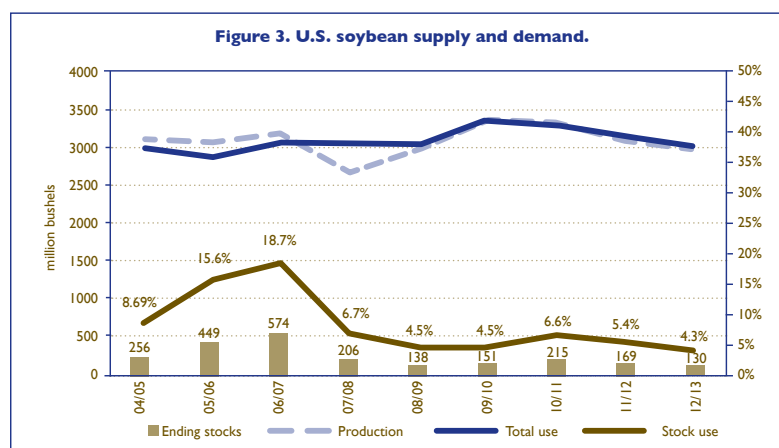
prices should remain in the \$12.50-13 per bushel range for soybeans.

Although the U.S. soybean crush is projected to drop to 1.57 billion bushels, the soybean oil extraction rate is expected to rise and could be an all-time high. Extended hot, dry weather is associated with higher oil yield.

Recent action in soybean oil exports raised the projection for an increase in exports to 1.8 billion pounds. The 2013 outlook for soy oil and soybean meal is for soybean oil stocks to fall and soybean meal to stay the same. Prices for oil could strengthen as stocks shrink while meal prices are up. They should hold in the \$400-450 range. ■



Source: The World Agricultural Supply and Demand Estimates Report. USDA. Dec. 11, 2012.



Source: The World Agricultural Supply and Demand Estimates Report. USDA. Dec. 11, 2012.

Crops: Cotton

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Cotton acreage may decline 20 percent or more in 2013 due to competitive net returns from soybeans and corn. The predominant factor in the 2013 cotton price outlook will be the burdensome level of the World stock. Less U.S. acreage and production combined with less foreign production would shrink the supply significantly, but unfortunately, large stocks will likely keep total supply at a comfortable level and a lid on prices.

U.S. acreage

Cotton producers planted 12.36 million acres in 2012—down 16 percent from 2011. During the winter of 2012, cotton futures (Dec12) were in the 90-cent area, but by planting time, prices had fallen to the 70-cent area. This scared some acreage away from cotton and into corn, soybeans and peanuts. 2012 acreage was already expected to be down due to high, expected net returns from competing crops, but this price downtrend into planting time added to the shift away from cotton.

After declining three consecutive years (2007–2009), acreage began to rebound in 2010 and again in 2011 before declining (Figure 1). Acreage will very likely be down 20 percent for 2013 and even more in the Midsouth (Arkansas, Louisiana, Missouri, Mississippi and Tennessee). Prices are once again sending a signal to growers to plant less cotton and encouraging them to look at other crops.

Despite a 16 percent decline in acreage, U.S. cotton production for 2012 was 12 percent higher than 2011. Although Texas suffered another year of drought, higher U.S. production occurred due to much lower acreage abandonment and a slightly higher average yield than in 2011.

U.S. cotton production for 2013 could be 14 million to 15 million bales or less, depending on plantings, abandonment and yield. This would be compared to 17.45 million bales for 2012.

Less U.S. production combined with less foreign production, if realized, would shrink the supply pipeline significantly.

Unfortunately, large World stocks will likely keep total supply (old crop carry-in plus new crop production) at a comfortable level.

World stocks

The predominant factor in the 2013 price outlook will be the burdensome level of stocks.

A projected 80.3 million bales of cotton will be carried into the 2013 crop year. This is a record level of stocks and represents 9 months of use. Stocks have increased from 46.8 million bales carried into the 2010 crop year.

The dramatic increase is due to the large 2011 foreign crop and erosion in cotton demand/use by textile mills. Prices are unlikely to improve significantly until burdensome stocks can be worked down either by improved demand and/or shortage in new production.

China's impact

In the 2013 outlook, China, even more-so than usual, represents a big unknown.

China is the World's largest cotton producer, user and importer. It currently accounts for almost half of the World's stocks (Figure 2). Going into the 2013 crop year, "non-China" stocks are at 43.2 million bales.

During the 2011 crop year, China began buying/importing large quantities of cotton to build up its reserves/stocks. China imported 24.5 million bales—much of it bought at higher prices than current value. Purchases of cotton by China help support and improve prices, and this was evident during the 2011 crop and a portion of the 2012 crop. But now that China has built its reserves, prices are dependent on its policies for releasing and using that cotton.

It's possible that China has overbought on imports. China is projected to begin the 2013 crop year with a record 37.1 million bales in reserve. Chinese textile mill use has declined from 46 million bales in 2010 to 35.5 million projected for the 2012 crop year. High imports

combined with the drop in usage have perhaps created a larger stocks situation than planned for.

India's impact

India is the second largest producer and user of cotton. Exports seem to vary widely depending on available supplies beyond domestic use and assurance of a comfortable level of stocks.

This creates uncertainty for both domestic mills and import buyers. This past season, due to lower than expected production, India imposed an export restriction to assure adequate supplies for its textile industry. Exports for the 2012 crop year are forecast at only 3.5 million bales compared to 10.5 million in 2011.

India's export policy has likely had minimal impact on 2012 prices, but does create more unknowns looking ahead to 2013.

Demand and price-lag scenario

For the 2012 crop, demand is forecast to improve to 106 million bales, but still far below previous trend levels. Until demand improves, balancing the supply-demand equation requires producing less cotton.

World production has exceeded demand each of the past three years (2010–2012). Producers need higher prices, but prices cannot rise (or be sustained at a level) that stifles demand.

U.S. cotton acreage declined three consecutive years from 2007 to 2009. Foreign production was also down. Prices did not respond because demand also declined during the period—declining 13.5 million bales in 2008. Demand improved in 2009, but declined again in 2010 (Figure 3).

This same scenario could be developing for 2013. Acreage and World production will likely decline significantly, but a push to higher prices may not follow unless demand improves. Until demand improves and high stocks can be worked through the pipeline, price increases may be limited, even with reduced production.

Cotton, cont'd.

Price outlook summary

Lowered production due to acreage shifts, which might typically result in higher prices for producers, will be tempered by large carry-in stocks and demand that continues to, at best, grow slowly in 2013.

Prices for the 2013 crop (Dec13 futures) are currently around 75 cents to 76 cents. Prices are likely to range mostly 75 to 85 cents with 75 to 80 cents being an average planning/budgeting price. Cotton price will need to be only somewhat competitive with corn, soybeans and peanuts.

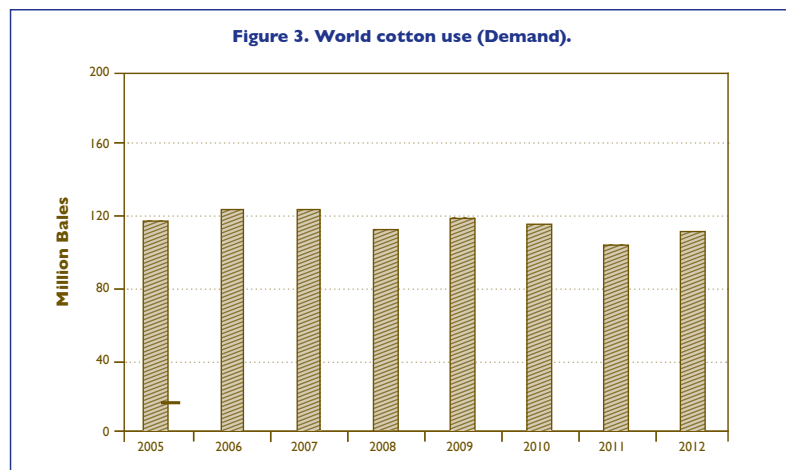
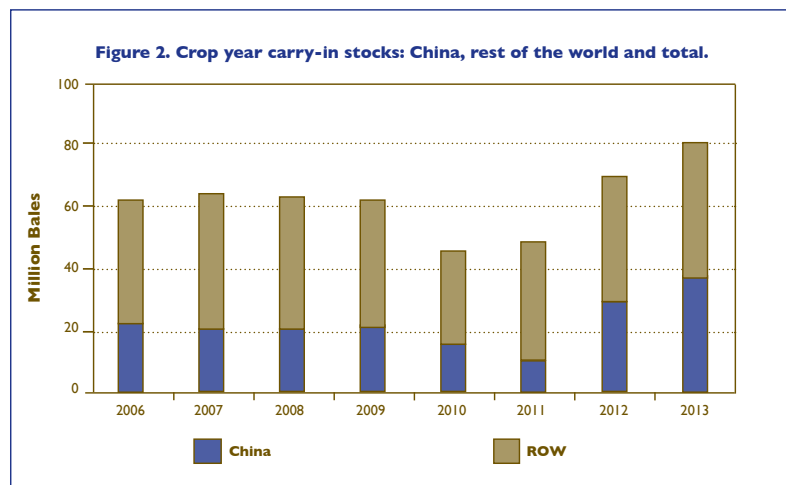
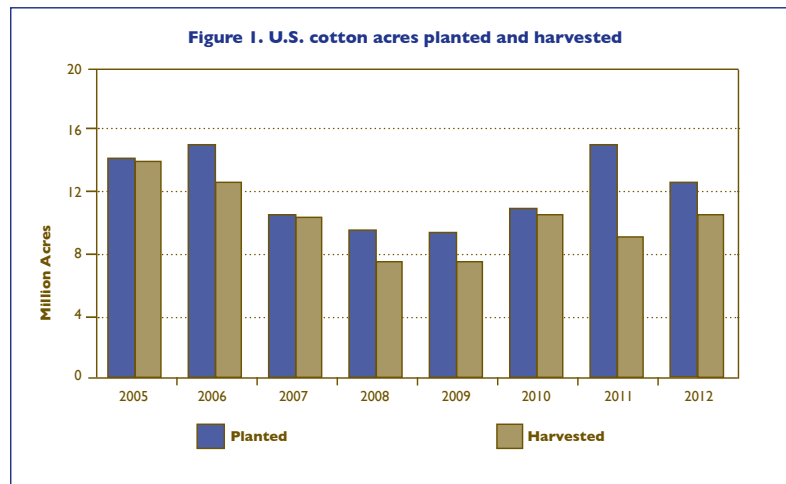
Producers should consider, however, that if U.S. and World acreage is reduced in favor of corn and soybeans, prices could eventually (by harvest time) trend up for cotton and down for other crops. However, the price of cotton will depend on all the factors discussed here.

Georgia cotton outlook

Georgia growers planted 1.29 million acres of cotton in 2012—down from 1.6 million in 2011. The majority of the acreage reduction shifted to peanuts. Georgia acreage may be down in 2013, but less so than the national average because peanut price opportunities are not expected to be as high as in 2012. Peanut acres may shift to corn and soybeans, but since soybeans may not be a desired rotation, some peanut acreage could return to cotton.

Georgia cotton growers enjoyed a record state average yield in 2012—topping 1,000 pounds per acre. Improved yield potentials, in cotton as well as peanuts, could factor into 2013 acreage decisions.

Growers are urged to set reasonable average price goals and take action when goals can be achieved. The optimum approach is to spread risk by pricing portions of the crop at three to four or more times during the year. Having revenue insurance rather than yield insurance can also play a role in reducing risk. ■



Crops: Vegetables

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U.S. vegetable situation

The U.S. fresh vegetable industry now excludes melon. Other fresh vegetable categories may also include sweet potatoes, dry peas, lentils and mushrooms.

Harvested area increased from 5,748 thousand acres in 2011 to 6,502 thousand acres in 2012. Despite the 13.1 percent increase in harvested area, total crop value decreased from \$19.2 billion to \$18.7 billion in the same time period, equivalent to a 2.9 percent decrease in value.

During this same time period, imported vegetables increased by 4.5 percent, while exports slightly increased by 1.5 percent.

Per capita use of vegetables increased by 1.8 percent, from 385 pounds in 2011 to an estimated 392 pounds in 2012. This means that Americans will consume more vegetables in 2012 compared to 2011 (Table 1).

Vegetable production has experienced a continuous decrease since 2009 when 1,280 million cwt. were produced. This figure decreased to 1,231 million cwt. in 2010 and further decreased to 1,217 million cwt. in 2011. However, there was a slight 1.3 percent increase in 2012 as production climbed to 1,233 million cwt. compared to the 2011 figure. Continuous growth is expected in 2013 if the favorable weather conditions we enjoyed in 2012 persist.

One of the problems in the vegetable industry is the unsolved immigration issue coupled with Georgia's newly withheld immigration policy in the court.

Vegetable prices

Fresh-market vegetables experienced inferior prices in 2012. This low price for almost all the available vegetables has been attributed to the excellent growing conditions across North America's vegetable growing regions. In the first quarter, prices for some vegetables were as low as 50 percent compared to 2011.

Tomatoes, which are amongst Georgia's top ten commercial vegetables, and lettuce suffered about a 60 percent fall in price in the same time period compared to 2011. Figure 1 depicts that tomato prices were

Item	Unit	2004	2005	2006	2007	2008	2009	2010	2011	2012
Area Harvested	Th. ac	6,581	7,128	7,139	6,852	6,648	6,617	6,989	5,748	6,502
Production	Mil. cwt.	1,355	1,281	1,285	1,332	1,278	1,280	1,231	1,217	1,233
Crop Value	\$ mil	15,533	15,906	16,601	17,385	18,591	18,217	18,165	19,240	18,676
Per Capita Use	Lbs	448	441	430	433	420	403	405	385	392
Unit Value	\$/cwt.	20.16	20.21	12.91	13.05	14.54	14.23	14.76	15.81	15.14
Import Value	\$ mil	6,185	6,570	7,275	7,921	8,514	7,951	9,145	10,257	10,720
Export Value	\$ mil	3,468	3,560	4,233	4,621	5,418	5,174	5,616	6,057	6,145
Balance of trade	\$ mil	-2,717	-3,010	-3,042	-3,300	-3,096	-2,777	-3,529	-4,200	-4,575

Source: Economic Research Service, USDA Vegetable and Melons Outlook/VGS-350/June 28, 2012 (and various issues).

extremely lower from January to May of 2012 compared to the same time period in 2011 and 2010 respectively.

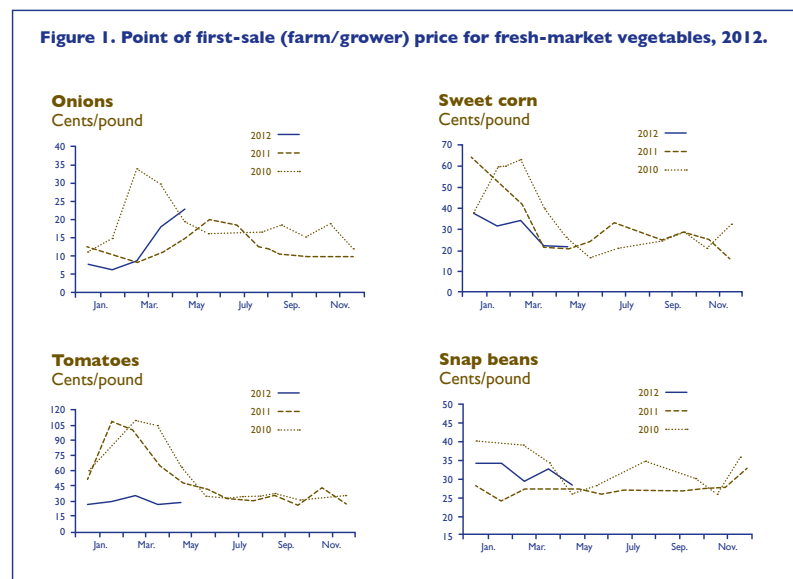
In the first quarter of 2011, sweet corn sold for 52 cents compared to 34 cents in 2012. Although the price differential for sweet corn was not as wide as tomatoes between 2012 and 2011, Figure 1 shows a steep, downward slope for sweet corn in the first quarter.

On the other hand, bulb onions sold for 39 cents in 2010 compared to 12 cents in the same time period in 2012. However, the price for onions significantly trended upward during the first quarter of 2012 and maintained a comfortable lead in the second quarter. Overall, prices were higher in 2011 than in 2012 for most vegetables, even in the third quarter.

Vegetable trade

Vegetable imports and exports suffered a downward trend. Exports were down by 10 percent compared to 2011. Some of the onion producing states reported problems with downy mildew. Although Georgia and Texas' sweet bulb onions enjoyed excellent cultivation weather conditions, downy mildew problems significantly affected yield and size. This could be one of the reasons for the 26 percent decrease in export from 2011. The U.S. vegetable import quantity from the three major countries, Mexico, Canada and Peru, also decreased while import from China actually increased by 13 percent. ■

Figure 1. Point of first-sale (farm/grower) price for fresh-market vegetables, 2012.



Source: Economic Research Service, USDA Vegetable and Pulses Outlook/VGS-350/June 28, 2012.

Crops: Fruits and Nuts

Dr. Esendugue Greg Fonsah, Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

Changes in the industry

It was announced by the USDA Economic Research Service that from 2012 on, market analysis for melons will be published in the Fruit and Tree Nuts Outlook instead of the Vegetable and Melon Outlook as was previously reported. This makes sense because everywhere in the world, melons are considered fruits, not vegetables, as it has been in the U.S.

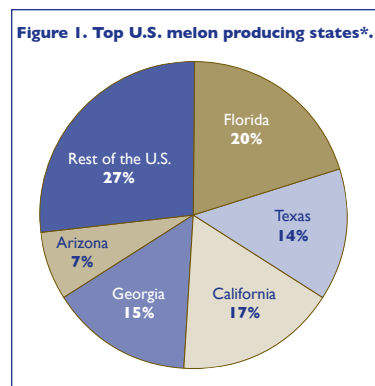
Watermelon

According to the USDA ERS report, although watermelons are thought to have originated in South Africa, the initial cultivation was first reported in Egypt 5,000 years ago. Cultivation in the U.S. began in 1629 in Massachusetts. Today the U.S. is the fifth largest producer of watermelon in the world after China, Turkey, Iran and Brazil. At the national level, the top five producing states are Florida, California, Georgia, Texas and Arizona. Georgia comes in third with 15 percent of total production (Figure 1).

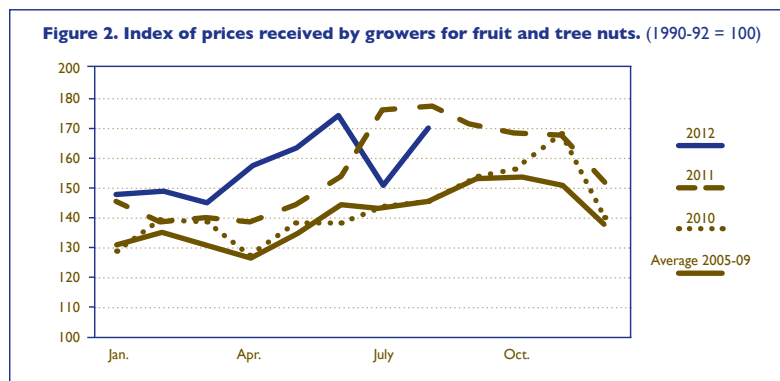
Canada imports over 98 percent of U.S. watermelon, and the rest goes to Mexico, Japan and Bermuda. On the other hand, the U.S. imports most of its watermelon from Mexico, Guatemala and Honduras.

Price index

The U.S. fruits and nuts industry experienced a significant increase in the grower's price index (GPI, 1990–92=100) in the first quarter of 2012. Thereafter,



Source: National Agricultural Statistics Service, USDA, 2011 Vegetables Summary.
*Average share of 2007-2011 domestic watermelon production.



Source: National Agricultural Statistics Service, USDA, Agricultural Prices.

the GPI took a nosedive of about 9 percent and fell below the 2011 level in the month of August (Figure 2).

The fall in price for most of the fruits such as grapes, lemons and oranges were significant enough to overshadow the overall GPI. For instance, when grape production in Georgia increased from 8 million pounds in 2009 to 9 million pounds in 2010, the price immediately fell from 74 cents per pound to 63.5 cents per pound in the same time period. In 2011 production decreased to 7 million pounds, and the price slightly increased to 64 cents per pound.

Since the 2012 production increased to 8 million pounds by 14.3 percent, it is anticipated that the prices will decrease to an undetermined amount below the 2011 price.

On the other hand, the 2012 consumer price index (CPI: 1982–84 = 100) was weak from January to March. The situation changed as consumers experienced higher prices for fruits and nuts in the second quarter (Figure 3). The decrease in the prices of fruits in the third quarter could be partially blamed on the increase of fruits coming from foreign countries this season compared to the same time of 2011.

Other fruits

Georgia peach growers began harvesting their crops earlier in 2012 compared to the year before. Peach production in Georgia was slightly reduced in 2012

compared to 2011. However, the quality, fruit size and overall cosmetic appearance were excellent. Other peach producing states such as California and South Carolina also experienced decrease in production with good quality fruits.

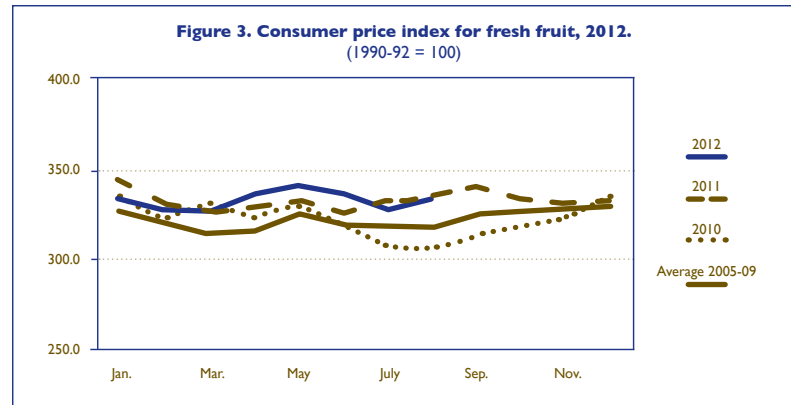
Blueberries growers from south Georgia received \$13–18 free-on-board price per flat of 12 six-ounce cups with lids in June 2012 compared to \$11–13 in the same time period the year before. Florida blueberries sometimes get superior prices compared to Georgia due to an early market window. Also, an increase in acreage and yields in Florida may create competition for Georgia.

Domestically, per capita consumption of blueberries has increased three-folds to 1.3 pounds. That means that Americans are eating three times as much blueberries now than they did three years ago. This is partially due to the health attributes associated with this crop.

About 50 percent of U.S. blueberries are sold locally, while the rest are exported to foreign markets such as Chile, Canada and Argentina. In 2011 the U.S. fresh blueberries export value reached a peak of \$376 million, while the export volume was 78.5 million. Canada, which used to be our No. 1 importer since 2000, lost its position to Chile from 2007 to present. For the past three years, about 60 percent of the U.S. blueberries are exported to Chile.

Drought has been a major problem for several pecan-producing states, and

that might have an impact in the 2012–13 production season, although an “on” year. In January 2012 grower prices ranged from \$1.50 to \$5.20 per pound, whereas it was \$1.40–3.60 the year before. Pecan prices are expected to stay strong in the 2012–13 production season. ■



Source: Bureau of Labor Statistics, U.S. Department of Labor. www.bls.gov/news.release/cpi.t07.htm

Crops: Timber

Tim Sydor, Wood Demand Research Program, Center for Forest Business; Bob Izlar, Director, Center for Forest Business; Mike Clutter, Dean, UGA Warnell School of Forestry and Natural Resources

The outlook for economic recovery in 2013, led by strong housing growth in the last few quarters, is rather good. Primary economic indicators that drive timber market development in the South (real GDP growth, housing starts, and commodity and energy prices) have been strong in the past quarter and are projected to sustain moderate growth in 2013.

Macroeconomic indicators

At the macroeconomic level, particular attention in 2013 should be given to the rate of decline in unemployment and to sectors of economy that contribute or subtract to or from GDP growth.

We expect private investments and consumption will keep pace in 2013, and GDP growth will no longer rely primarily on federal spending. The outlook for unemployment in 2013 is moderately good, with the rate declining to 7.7 percent by the fourth quarter, indicating an increase in timber demand.

Housing starts and building permits have been a bright spot in the past few quarters, with an estimated 16.4 percent increase in housing starts in 2012. In 2013 housing starts are expected to drive economic development and grow from 800,000 seasonally adjusted annual rate (s.a.a.r.) units to 985,000 s.a.a.r. units.

Building permits are breaking into the 900,000 s.a.a.r. category and confirm positive expectations for housing starts.

Historically low mortgage rates and low house prices should encourage residential housing investments in 2013, but a shadow of foreclosed or soon-to-be foreclosed housing inventory and continued constraints to home ownership may dampen the attractiveness of new investments.

Energy prices

According to our research, high prices of gasoline and diesel fuels tend to push demand for timber products in the South down. Gasoline and diesel prices are projected to increase early in 2013, but decline through the year by 3 percent and 5 percent, respectively. In relative terms, diesel (Gulf Coast Ultra-Low Sulfur Diesel) prices have an estimated elasticity impact on pine and hardwood grade demand of 7.2 percent and 7.7 percent, respectively.

Commodity prices

Commodity prices are expected to follow demand for the indicators of end-use. Random Lengths Framing Lumber price has grown approximately 35 percent in the third quarter of 2012 compared to the same period in 2011. The lumber

price is expected to drop slightly in early 2013 due to slowing residential-housing construction during the winter, but will bounce back by the end of the first quarter or second quarter of 2013 and hold through the year.

Softwood pulp prices (Northern Bleached Softwood Kraft) have been trending down in the last 12 months, declining 11 percent. Current reports from major pulp producers in the U.S. indicate mainly unchanged softwood pulp prices by the end of 2013, but some increases due to costs.

Demand outlook

Demand for pine grade timber¹ has been steady for the past three years (Figure 1), and is projected to grow 11.2 percent by mid-2013 due to improving macroeconomic factors.

The relative impact of recovery will be different among the Southern states, with Alabama, Louisiana and Mississippi likely realizing the largest relative gain in timber demand. These three states also lead the pack on timber demand declines since late-2006.

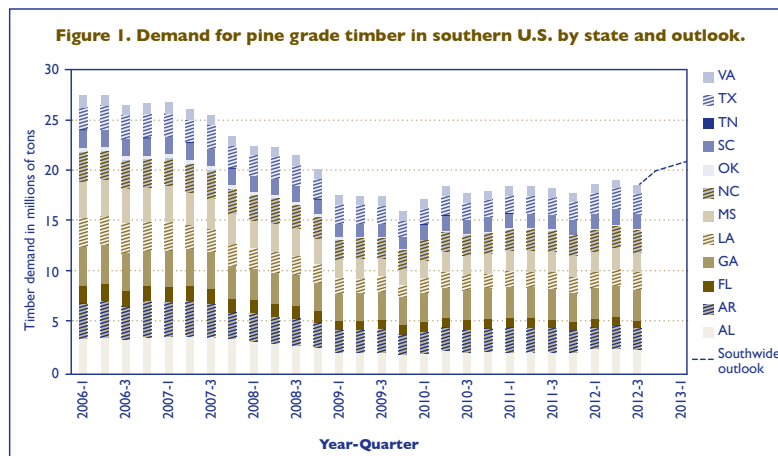
Hardwood grade (including timber used in lumber and pallet production) demand will largely mirror that of the pine grade, increasing 7.4 percent by mid-2013.

Timber, cont'd.

Stumpage prices for grade products, both softwood and hardwood, are likely to modestly increase, pending major weather occurrences. Timber inventory on the stump that was preserved and growing in forests since late 2007 will likely dampen any significant price increases as timber demand recovers. However, timber supply may be constrained by logging availability and capacity, extreme weather events and energy price changes. These factors also may raise delivered timber prices even with abundant timber inventory.

Pulpwood² (raw pulp material) demand was steady in the past five years, mainly due to product substitution for the declining flow of residual chips from lumber facilities. Demand for pulp used in newsprint and writing papers (the largest sector of pulp production) has been under pressure from the increasing popularity and use of e-books and tablets. Since population and economic growth are trending up in 2013, demand for pulp consumer products, such as paper towels and napkins, is expected to grow. Oriented Strand Board (also produced from pulp) demand is positive for 2013, too, given strong housing growth expectation.

The announced bioenergy facilities in the South may have a significant impact on prices and demand for pulpwood timber in the region. There are 91 announced bioenergy facilities for the southern U.S.³ with an estimated timber



Source: UGA Center for Forest Business: Wood Demand Report, Q3 2012.

demand of 36.8 million tons, 14 percent over the total timber demand in 2012. These include Fram Renewable Fuels and General Biofuels pellet projects in southern Georgia, which are expected to start by 2014 with a total combined wood demand of approximately 2 million tons.

Bioenergy projects will increase demand for wood-based raw materials and compete with the traditional forest industry at the local level, likely leading to higher timber prices. Some current operations are already starting to impact local market dynamics.

For instance, a Georgia Biomass wood pellet facility in Waycross, Ga., with a 750,000 metric ton capacity (the largest in the country) is estimated to consume 1.5 million to 1.7 million tons of pulpwood per year. Historically high prices for pine pulpwood in southern Georgia in the last

quarter may be attributed in part to the increasing pulpwood demand from this facility.

Therefore, declining pulpwood demand from newsprint and paper consumption in 2013 will likely be compensated by an increase in demand from producers of Oriented Strand Board (OSB) and bioenergy. At the local level, the aggregate impact will likely lift timber prices in 2013.

Overall, the outlook for timber markets in U.S. and, particularly, the South is positive. Demand for primary timber products is expected to increase, and timber prices have a good chance of moderate growth, depending on logging capacity and unexpected energy price or weather impacts. ■

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¹ Grade timber includes large and medium sized logs that are primarily used in lumber production. Some portion of medium-sized logs, known as chip-n-saw, are chipped and further used in pulp production.

² Pulpwood is a common name for small-sized logs that historically have been used primarily in pulp production, but more recently have also been used for Oriented Strand Board and bioenergy production.

³ Includes facilities passing a viability screen. ([www.forisk.com/UserFiles/File/WBUS_Free_201209\(1\).pdf](http://www.forisk.com/UserFiles/File/WBUS_Free_201209(1).pdf))

Crops: Environmental Horticulture and Sod

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The 2013 economic outlook for Georgia's green industry (environmental horticulture and sod) is closely tied to the general economic outlook for U.S. consumers and taxpayers. This is because goods and services provided by and purchased from green industry businesses are consumer goods purchased using discretionary income and are not one of the basic physiological needs (air, water, food, shelter or health) of the consuming public.

Post-election commentary focused on the "fiscal cliff" looming for December 31, 2012, and the seemingly unavoidable roadblock and stalemate in Congress, sending the markets into a downward spiral. However, the markets switched course Thanksgiving week, as it appeared that progress was on the horizon toward finding a balance between spending and revenue.

The fiscal cliff was more like a chasm than a cliff, because there a wide gap existed between the future costs of the services that the public has become accustomed to receiving from the federal government and the tax revenues that the public has been sending to the government to pay for those services.

How will this affect the economy? Economic growth measured by the change in GDP (Gross Domestic Product) would decline 0.5 percent in a fiscal cliff scenario, but it could increase 1.7 percent with the status quo policies. The unemployment rate would hover at 9.1 percent were we to go over the fiscal cliff, but stay at about 8 percent if not.

The U.S. economy will likely hit the debt ceiling by February 2013, so something has to be done. Options include going over the fiscal cliff, extending the tax cuts and eliminating the reductions, extending some

cuts but not all current tax and funding cut policies, or phasing out tax and funding cuts more gradually. It's up to the decisions by the policy makers in Washington, D.C. These effects will be the underlying cause of the green industry's performance.

As for Georgia's green industry, there is good news and bad news for demand. Housing prices have bottomed and are starting to rebound, but homeownership still trends down. However, there is a positive home improvement outlook, including landscaping and outdoors living activities. The 2013 home improvement market is forecast to grow by nearly 5 percent.

Another bright spot for 2013 is the predicted decrease in the cost of oil. Net oil imports as a share of U.S. consumption is declining, daily domestic oil production is increasing, and the WTI (West Texas) crude is forecast at \$93 per barrel in 2013 for 6 plus billion barrels per day production.

There will continue to be regional differences in gas prices at the pump. The Southeast is experiencing a fourth quarter average of \$3.58 per gallon for regular unleaded and \$4.05 per gallon for diesel, with an annual average price paid at the pump in 2013 forecast at \$3.43 per gallon for gasoline.

As for natural gas, storage inventory in the fall of 2012 was 13 percent higher than the year before, suggesting that natural gas generation will decline 10 percent in 2013. The Henry Hub spot price for natural gas in 2011 averaged \$4 per MMBtu (Million Metric British Thermal Units) and \$2.65 per MMBtu in 2012. The price is forecast to be \$3.34 per MMBtu in 2013.

Even with so much uncertainty about the economic climate in 2013, there are still opportunities for Georgia's green industry.

Georgians will still want things that enhance the quality of their lives. They are looking for value, relevancy and authenticity, and consumers afford what they want as expenditures rise to meet income.

The corporate executive sentiment index is not as positive as the consumer sentiment index—the corporate executives see sluggish growth in GDP, are concerned about the fiscal cliff (or its alternatives) and are slow to invest in capital expenditures and construction of bricks and mortar, whereas the consumers are seeing some, albeit slight, increases in their household incomes.

The biggest positive changes or growth in spending by age and life-stage demographics are occurring among families with college kids (43–50 years of age for heads of households) followed by the young families (ages 31–42), the married young adults (ages 23–30) and the empty nesters (ages 50 and over). The lowest spending demographic categories are singles 18–22 years of age and the retired on fixed incomes or pensions (over 60).

Georgia's green industry consumers have never been in want of supply; in fact, low capacity utilization by Georgia greenhouses and nurseries led to the sell-off and abandonment of several of these businesses during the past five years, as production was economically infeasible.

Nonetheless, imports of cut flowers and bare root plant material continue to increase. In 2013 focusing on consumer demand and the consumers' needs by the industry survivors is necessary for generating marketing opportunities and resurgence in economic viability (increased profits and profitability with decreased debt) for Georgia's green industry. ■

Livestock: Beef

Dr. R. Curt Lacy, Department of Agricultural and Applied Economics,
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2012 recap

2012 was a very good year for beef cattle producers in Georgia. Historically high cattle prices combined with favorable weather to produce considerable profits for cattlemen in the first half of the year. However, as concerns about the size of the corn crop mounted in midsummer, and corn prices skyrocketed, calf prices took a major tumble before stabilizing in late August and finishing the year on a strong note.

Through mid-November, prices for 500–600 pound calves averaged 19 percent above 2011's prices and almost 46 percent above the five-year average (Figure 1). For some perspective, during the first half of 2012 prices averaged about \$30 per hundredweight above those of 2011. On a 550 pound calf, this equated to an increase of over \$170 per head in revenue with some weeks seeing year-over-year changes in excess of \$200.

While 2013 is not likely to see a repeat of 2012 in terms of price increases, cattlemen have several reasons to be optimistic as they look to 2013 and beyond. The primary reasons are declining cattle numbers and hopefully, stable to improving demand. The combination of these two should cause cattle prices to remain very favorable for the next several years.

Weather and crop impacts

Weather and crop markets combined to keep things interesting in 2012. This trend is expected to continue into 2013. While dry pastures and increased feeding amounts were a major concern in late spring, the major damage was done later in the year as corn prices increased rapidly, causing calf prices to drop precipitously.

Generally speaking, a 10 cent per bushel increase in the price of corn will decrease the price of a 500–600 pound calf in Georgia by about 75 cents to \$1 per hundredweight and vice versa. This phenomenon is due to the fact that output prices and feed prices are givens for cattle feeder. As a result, the only thing they can control is the price that they pay for calves.

It is also worth pointing out that when feed prices get unusually high, the differential between heavy and lighter-weight calves diminishes, as it is more economical for buyers to purchase the weight on the calves than to buy the calves and add the weight themselves.

The reason this discussion is important is because current, long-term weather forecasts do not indicate any significant drought relief in the Midwest. If this scenario does occur, grain markets will be very volatile, in turn causing cattle markets to be equally as sensitive.

Grain markets are not the only way weather has impacted the cattle market in recent years. For the last two to three years, markets have signaled to producers that they should be increasing production. However, different parts of the country have suffered severe droughts, which served to not only limit expansion, but rather caused increased contraction in the sector.

Since the production cycle for beef cattle is much longer than for many other livestock industries, the result is that it will be quite some time before we see any appreciable increase in beef production in the U.S. In fact, beef production is expected to continue to decline at least through 2014 (Table 1).

Exports

Exports are very important to the economics and marketing of beef. Historically, the U.S. exports about 10 percent of its beef production. However, in

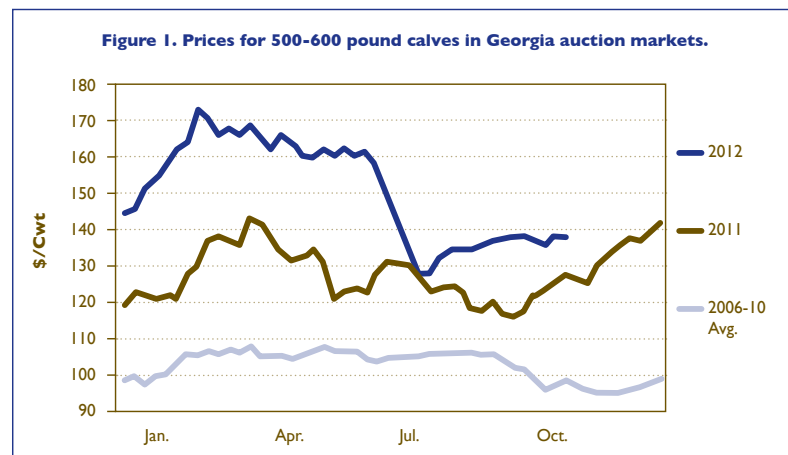
recent years that percentage has increased 11 plus percent due not only to increased volumes of exports, but also due to the shrinking beef-cow herd. In fact, in 2011 exports as a percentage of total beef production were higher than in 2003. For those readers that can't recall, 2003 was the year immediately prior to the discovery of BSE (Bovine spongiform encephalopathy) in the U.S. cowherd that effectively eliminated beef exports for the next few years.

Beef exports are expected to remain steady to increasing for the next several years. The U.S.'s claim to fame is the fact that we can provide large quantities of high-quality, grain-finished product. Our reputation is also bolstered by our superb inspection system and very low incidences of BSE. These and other factors combine to make us the No. 1 beef producer in the world, even though we are ranked fourth in cattle inventory.

Production and price forecast

Beef production for 2013 is expected to be down compared to 2012, and that trend is expected to continue into 2014 (Table 1). As a result, prices are expected to remain favorable for the next several years.

While it is not likely that we will see the price increase in early 2013 that we saw in 2012, it is expected in late 2013 or 2014 that prices will increase substantially. This price increase is a function of tight supplies, a (hopefully) improving economy and an increased grain supply in 2013.



Source: Agricultural Marketing Service, USDA. Compiled by Livestock Marketing Information Center.

Summary

2012 was a very good year for cattle producers, and 2013 is expected to be another good year. However, concerns about weather, grain prices and the economy should temper any irrational exuberance. Looking forward to later in 2013 and 2014, tight supplies are expected to result in stable or higher prices for cattle producers. ■

Table 1. Historic and projected beef, red meat, poultry production and corresponding Georgia cattle prices.

	2011	2012	2013	2014
Beef production (Bil. lbs.)	26.29	25.78	24.67	23.55
Total red meat and poultry production (Bil. lbs.)	92.42	92.96	89.90	89.95
Prices for 500-600 lb. Georgia steers and bull calves (\$/Cwt.)	\$127	\$150	\$145-160	\$155-185
Prices for 700-800 lb. feeder steers (\$/Cwt.)	\$112	\$128	\$125-140	\$135-150

Source: USDA, LMIC and UGA.

Livestock: Pork

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2012 recap

2012 was very different for pork producers compared to 2011. While carcass hog prices in 2012 were certainly good by most historical standards, higher input costs significantly reduced profits. The combination of these lower profits and projected, high feed costs in 2013 caused many producers to begin reducing sow numbers in the second half of 2012.

Through October 2012, net prices on a carcass-weight basis were running 3 percent below 2011 levels but still 30 percent above the five-year average. With carcass weights remaining steady at 203 pounds (dressed-weight basis), the net effect was a loss of \$6.21 per head in revenue compared to 2011.

2013 production and supplies

Pork production is expected to be down considerably in 2013. Both the USDA and the Livestock Marketing Information Center project total pork production to be between 22.6 billion and 23 billion pounds, a decrease of 2 to 2.5 percent.

This significant reduction in production demonstrates just how pessimistic pork producers are regarding the overall economy, the outlook for pork prices and the uncertainty of the feed markets.

As discussed in other livestock articles in this publication, drought and feed prices wreaked havoc on livestock profits in 2012, especially for pork and poultry producers. This major factor, as

well as a very tepid economic forecast, has many pork producers very cautious about expanding pork production beyond what can be accomplished by increasing efficiency.

September hogs and pigs report

The September 2012 Hogs & Pigs report held few surprises. USDA National Agricultural Statistics Service pegged the nation's breeding herd at 5.79 million head, roughly one-half percent above 2011's number. The report indicated that hog producers intended to farrow fewer sows in June –November as last year.

The net result of these static farrowing intentions should mean slightly less pork production in 2013 as carcass weights are projected to remain the same, but pigs per litter are expected to increase slightly in 2013 as they have in all previous years.

The net result of these static farrowing intentions should mean slightly higher pork production in 2012 as carcass weights are projected to remain the

same, but pigs per litter are expected to increase slightly in 2011 as they have in all previous years.

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. The top four markets for U.S. pork are shown in Table 1.

It is worth noting that not only is the U.S. the largest exporter in the world, but the level of exports continues to grow. In 2004 pork exports accounted for 13 percent of U.S. pork production and net pork exports accounted for 8 percent of production. By 2012 pork exports represented 23 percent of domestic production with net pork exports accounting for 19 percent of U.S. pork production.

Table 1. Top four markets by volume and value for U.S. pork in 2011.

Country	Rank in volume/Volume in metric tons	Rank in value/Value in USD
Japan	2/434 million	1/\$1.96 billion
Mexico	1/538 million	2/\$1.04 billion
Hong Kong/China	3/483 million	4/\$910 million
Canada	4/206 million	3/\$738 million

Source: U.S. Meat Export Federation.

Pork, cont'd.

Outlook for prices and profitability

Prices are expected to remain about the same or slightly higher during the first half of 2013 compared to 2012. However, once pork producers lower, farrowing intentions are realized, production will decline and prices will increase in the latter half of the year when compared to 2012. Profits are expected to improve with increasing sales prices. As repeatedly mentioned, feed prices and costs will remain volatile and thus will be the deciding factor on profits. Projections for production and prices for 2013 are shown in Table 2.

Summary

2012 was a tale of two very different halves of the year. The first half was fairly good, and the second half not good at all. 2013 is shaping up to be a better year

but likely not as good as some would hope. While declining supplies and an improving economy will be supportive of pork prices, feed prices will be the primary profit determinant in 2013. ■

	Production (bil. lbs.)		Prices (\$/Cwt. carcass basis)	
	2012	2013	2012	2013
Q1	5.86	5.71	\$84.11	\$81-87
Q2	5.52	5.36	\$85.31	\$86-92
Q3	5.62	5.52	\$84.74	\$90-94
Q4	6.24	6.07	\$79-84 ^a	\$82-88
Year	23.22	22.66	\$83-85 ^b	\$85-90

Sources: LMIC, USDA and University of Georgia.
^a and ^b are preliminary estimates for 2012.

Livestock: Dairy

Dr. Tommie Shepherd, Center for Agribusiness and Economic Development, UGA College of Agricultural and Environmental Sciences

Georgia will begin 2013 with approximately 255 dairies, which are collectively expected to produce about 1.56 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. Losses have been primarily among smaller dairies milking 200 or fewer cows, while the number of dairies milking 750 or more cows has increased. 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 recently increased as existing farms have expanded and several new ones have been established.

The cumulative 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 2010. Production, however, rebounded and is expected to exceed 1.5 billion pounds in 2012, as several recently established dairies begin to realize their potential. Milk production has also received a boost through efficiency gains, as milk per cow has increased.

Milk production is highly concentrated in the central and southwest parts of the state. The top five milk-producing counties are home to 47 percent of the state's dairy herd, which produce an equivalent percentage of Georgia's 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.

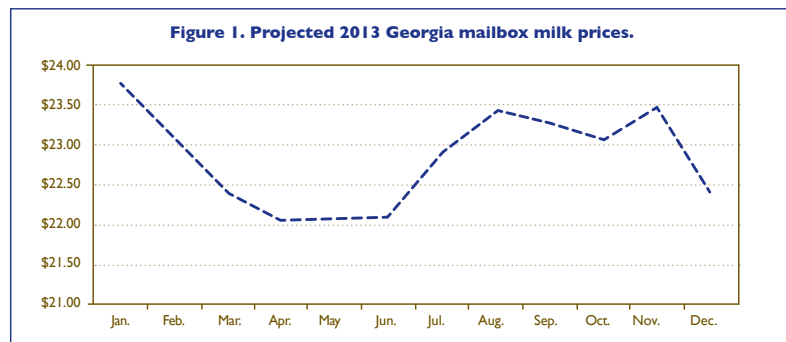
Milk prices are characterized by volatility from multiyear price cycles. Following two years of record high milk prices in excess of \$22 per cwt. during 2007 and 2008, milk prices plummeted below \$16 per cwt. during 2009. Prices recovered to around \$20 per cwt. in 2010

and then reached a new record high of \$23 per cwt. in 2011 before moderating to around \$21.50 per cwt. in 2012.

Consequently, prices can once again be expected to cycle upward in 2013 as a result of the reduced cow numbers and per cow productivity at the national level brought on by severe drought conditions and high feed prices during 2012. Prices are not, however, expected to rise as sharply as in past cycles and may be expected to average between \$22 and \$23 per cwt. during 2013 (Figure 1).

Global market

Local milk prices are increasingly being influenced by regional, national and even international supply and



demand conditions for dairy products. Federal Milk Marketing Order policies (minimum prices that must be paid by milk processors to dairy farmers) tie local milk prices to national market conditions, which may be influenced by global dairy markets. World demand for U.S. dairy exports in 2013 is uncertain due to increasing food prices in many developing countries and a deepening debt crisis in Europe, which may dampen international demand for exports.

U.S. market

U.S. milk production weakened in late 2012 due largely to severe drought conditions, which resulted in high feed prices and a reduction in both the quality and quantity of available forage. Consequently, dairy cow numbers declined as culling rates increased and cow productivity was flattened or reduced. The greatest impact of these conditions was felt in the West and Southwest, while many parts of the Southeast, including Georgia, actually saw production increase at the greatest rate in years.

At the national level, the trend in reduced cow numbers and productivity is expected to persist into at least the first half of 2013. Flat or reduced milk production, coupled with fairly strong domestic dairy-product sales, will set the

stage for higher dairy-commodity prices and, consequently, higher farm-milk prices in 2013.

2012 saw U.S. milk prices decline slightly (about 7 percent) from the record high levels of 2011, as production increases were slowed by severe heat and drought conditions. Current dairy market conditions suggest that farm milk prices will strengthen only moderately during 2013. While weaker demand for U.S. dairy exports is a possibility, reduced milk production should prevent any significant accumulation of domestic stocks of manufactured dairy products thus providing support for farm-milk prices. This support, coupled with flat to declining milk production, will result in moderate farm level price increases and increased levels of returns over feed costs to producers.

At a national level, milk production can be expected to remain unchanged from 2012, or at best, grow less than 1 percent compared to historical, average annual baseline growth of about 2 percent. Consequently, milk prices during 2013 can be expected to increase by about 4 percent, up to 6 percent from previous levels.

Georgia

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 adjusted upward to account for the fact that the state is “milk deficit,” or consumes more milk than it produces. Milk prices in Georgia will follow the national trend of increasing by an estimated 4 percent, up to 6 percent from the 2012.

The trend of increasing milk production seen over the past two years will likely level out at around 1.5 billion pounds a year. Production costs may moderate somewhat for producers who purchase feed, as the high feed cost situation improves. However, energy and other input costs will continue to rise, which will impact all dairy farmers, especially those who grow a significant portion of their own feed.

Summary

2013 milk prices are expected to increase only modestly from 2012 levels as export demand slows. Growth in the nation’s milk supply will also slow, to 1 percent or less. As feed costs moderate and increasing milk prices improve farm profitability, there will be more intensive feeding and lower cull rates. This will also set the stage for yet another price and production cycle in 2014. ■

Livestock: Poultry

Dr. John C. McKissick, Center for Agribusiness and Economic Development, UGA College of Agricultural and Environmental Sciences

The poultry industry’s greatest fears were realized in 2012 as a razor-thin feed grain supply was diminished even further due to drought and continued, mandated corn demand from the ethanol industry. As a result, the primary feed ingredients and input costs of the poultry industry are projected to average around 25 percent higher in 2013. In 2012 Broiler producers pulled the plug on production, resulting in higher product prices. Turkey and egg producers maintained or increased production with differing results (see table).

Poultry Outlook Summary					
Broilers	2009	2010	2011	*2012	*2013
Broiler Production (Mil. Lbs.)	35,511 - 3.8%	36,911 + 3.9%	37,201 + 0.8%	36,717 - 1.3%	36,415 - 0.8%
Exports (Mil. Lbs.)	6,818 - 2.1%	6,765 - 0.8%	6,971 + 3.1%	7,078 + 1.5%	6,950 - 1.8%
Per Capita Supplies (Lbs.)	79.7 - 4.5%	82.3 + 3.3%	82.9 + 0.7%	80.2 - 3.3%	79.1 - 1.4%
12 City Price (Cents/Lbs.)	\$77.60 - 2.6%	\$82.90 + 6.8%	\$79.00 - 4.7%	\$84.00 + 6.3%	\$87.00 + 3.6%
Turkeys	2009	2010	2011	*2012	*2013
Turkey Production (Mil. Lbs.)	5,663 - 9.3%	5,643 - 0.4%	5,791 + 2.6%	5,976 + 3.2%	5,790 - 3.1%
Exports (Mil. Lbs.)	534 - 21.0%	582 + 9.0%	703 + 20.8%	741 + 5.4%	690 - 6.9%
Per Capita Supplies (Lbs.)	16.9 - 4.0%	16.4 - 3.0%	16.1 - 1.8%	16.4 - 1.9%	16.0 - 2.4%
3 Region Price (Cents/Lbs.)	\$76.50 - 12.6%	\$90.40 + 18.2%	\$102.00 + 12.8%	\$107.00 + 4.9%	\$106.00 - 0.9%
Eggs	2009	2010	2011	*2012	*2013
Total egg production (Mil. doz.)	7,546 + 0.6%	7,630 + 1.1%	7,655 + 0.3%	7,700 + 0.6%	7,610 - 1.2%
Exports (Mil. doz.)	242.2 + 17.4%	258.4 + 6.7%	276.3 + 6.9%	292.2 + 5.8%	256.0 - 12.4%
Table egg per capita supplies	248.2 0.0%	247.9 - 0.1%	247.6 - 0.1%	247.9 + 0.1%	244.4 - 1.4%
Grade A, NY Price (Cents/Doz.)	\$103.0 - 19.7%	\$106.3 + 3.2%	\$115.3 + 8.5%	\$118.8 + 3.0%	\$116.5 - 1.9%

Source: U.S.D.A. and The University of Georgia.
*Forecasted

Poultry, cont'd.

While 2013 may bring hope for a better crop year, the fact is that the U.S. will have the smallest feed usage to supply margin since the '90s. Due to the feed cost explosion, the poultry industry will be pushed to reduce production and further increase efficiencies in order to maintain something close to a positive bottom line. If feed costs don't moderate, there will be fewer growers and producers in an industry accustomed to expansion.

Broiler profit outlook

Broiler producers experiencing negative cost/price margins began shaving production in late 2011, resulting in a more than 1 percent cut in 2012. Prices responded by gaining more than 6 percent on 2011 levels, setting an averaging record of 84 cents per pound. 2013 should result in another record high price if production is further trimmed.

As broiler prices have become much more responsive to production growth or contraction in the last 15 years, the industry has had to rely on an unnatural tendency to slow expansion. For instance, a 1 percent production change has resulted in an opposite 1.5 percent change in real broiler prices as opposed to a 0.5 percent change in the '90s. This places greater emphasis on managing growth in order to grow revenue.

Production looks likely to be down by 3 percent in the first half of 2013 and stabilizing some in the second half, assuming feed grain prices moderate (Figure 1). If the feed crop is not exceptionally good, the industry will have to contract further, possibly resulting in the failure of some firms and the loss of contracts for some growers. Cash flow strains will continue to be experienced by growers if the 2013 contraction is accomplished.

Domestic and international demand is another important factor to consider in the broiler price outlook. In 2012 white meat prices mostly exceeded 2011 levels but remained below the 2006–2010 averages. This implies some short-term stability to white meat demand but not long-term improvement. Dark meat prices on the other hand were higher in 2012 than in the previous six years. Dark meat is the preferred meat internationally, but has seemingly experienced demand growth domestically as wings and legs have gained favor on fast food and snack plates.

U.S. broiler exports remained strong

in 2012, reaching over 7 million pounds. However, 2013 exports are unlikely to exceed the 2012 levels as Mexico's industry recovers from avian influenza outbreaks and Russia relies more on its growing broiler industry. While exports are forecast to fall 2 percent or so in 2013 from 2012, exports will still account for a hefty 19 plus percent of U.S. production. As always, trade disputes and economic retaliation by countries for U.S. policy threatens meat exports and makes export forecast extremely difficult.

Per capita domestic broiler meat supplies (production net of exports) will decline in 2013 by a little more than production. The forecast of 1.4 percent year-over-year drop will likely represent the fifth out of the last seven production years in which per person domestic supplies were reduced. The forecast levels of production combined with foreign demand should result in implied whole bird values about 4 percent higher than realized in 2013. Improved domestic demand, unexpected strength from exports or production cuts would be needed to boost prices higher.

However, the increased broiler price may not be enough to restore profitability. Feed costs are stuck at record high levels until the 2013 crop is planted. An exceptional World and U.S. 2013 feed grain crop will be required just to partially relieve the tight supply to usage ratio. Transportation, energy and labor costs will be up again in 2013, making for the continuation of a tight profit margin at best. The cost burden of pending and expected national and state level regulations are also potential profit-robbing factors for the industry.

Turkey prices and returns

Turkey production grew another 3 percent in 2012; however, by the fourth quarter it became apparent that turkey businesses overreached at a time of record feed cost.

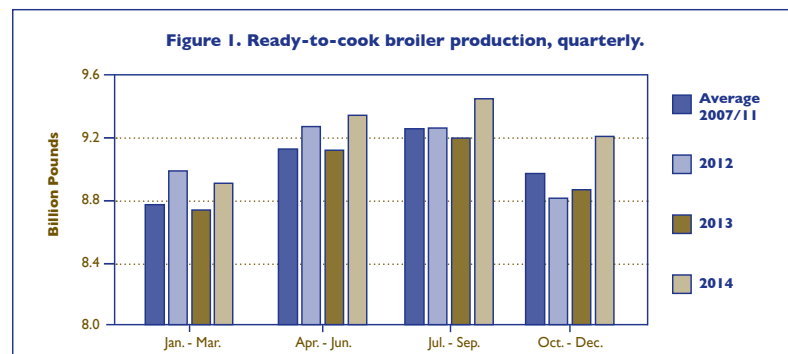
Even though turkey exports found new record levels (up more than 5 percent), turkey cold storage stocks expanded. Fourth quarter 2012 turkey prices were expected to fall by a few cents per pound compared to 2011, even though yearly average prices came in close to \$1.07 per pound (a 5 percent gain over 2011).

Given the profit situation at 2012's close and cost uncertainties for 2013, turkey producers are likely to respond with a 3 percent or more production cut. Exports are also likely to fall off some from the record levels. At this point it seems unlikely that the production cut coupled with lower exports will be enough to push turkey prices above 2012's level. Turkey producer's profit margins will be even tighter in 2013 unless costs unexpectedly decline or production cuts increase.

Egg industry outlook

Egg producers look to be in a similar shape as turkey producers as they face the tightest profit margin since the mid-2000s. With 2013's broiler egg demand continuing its downward spiral, hatching egg producers will face challenges. Table egg markets on the other hand are in a more favorable state. 2012 table egg exports were up 6 percent at almost 300 million dozen. With strong exports and steady U.S. demand, 2012's price will average around \$1.19 per dozen, the second highest yearly price since 2008's price of \$1.28 per dozen.

However, with many of the same questions for 2013 as poultry meat producers, total egg production is likely to decline by 1 to 2 percent from 2012's production. While production has inched up since 2008 and costs reached record levels in 2012, prices have remained at very favorable levels. In 2013 exports are likely to decline by 12 percent, leaving 2013 prices 2 cents or more per dozen less than 2012's yearly average. ■



Emerging: Biofuels

Dr. George A. Shumaker, Center for Agribusiness and Economic Development,
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The U.S. biofuels industry, encompassing all liquid fuels derived from renewable sources, ramped up output from 2009 to the middle of 2012 to meet mandates for increased biofuels use under the Renewable Fuel Standard (RFS2) implemented by the Energy Independence and Security Act of 2007, according to the Energy Information Administration's recently released report *Biofuels Issues and Trends*.

Ethanol grew from 8 percent of U.S. gasoline consumption by volume in 2009 to nearly 10 percent in 2011 and in the first eight months of 2012. Volume shares are an important metric because of limits on the share of biofuels that can be used in motor fuels approved for use in all vehicles.

Biodiesel consumption grew from 326 million gallons in 2009 to 878 million gallons in 2011, after having declined in 2010. Biodiesel's share of all distillate fuel reached 2.2 percent in September 2011, and after declining over the past winter, was at or above 2 percent in the spring and summer of this 2012 (Figure 1).

Ethanol production rose steadily over the past decade, increasing from 2.1 billion gallons in 2002 to 13.3 billion gallons in 2010. Growth in ethanol production slowed after 2010 as ethanol's share in the gasoline pool approached 10 percent by volume (Figure 1). Ethanol production in 2011 was 13.9 billion gallons, and monthly production through the first half of 2012 remained close to that level. However, production has slowed somewhat since July, in part because of the drought's

impact on the current corn crop and the price of corn.

Biodiesel production has followed a different path. In 2010 the production of biodiesel fell 34 percent, at least partly due to the expiration of the biodiesel tax credit at the end of 2009. The reinstatement of the credit in late 2010, retroactive to the beginning of the year, coupled with increased demand under the RFS2, reversed the decline in 2011. The federal excise tax credits for noncellulosic ethanol and biodiesel and the ethanol import tariff expired at the end of 2011. The production tax credit for cellulosic biofuel was extended through the end of 2013.

With almost all gasoline in the U.S. already blended with 10 percent ethanol (E10), significant increases in domestic consumption of ethanol as required under the RFS2 over future years will be challenging unless higher-percentage ethanol blends can achieve significant market penetration.

E10 was the maximum ethanol blend allowed for use in most of the vehicle fleet until 2011, when the Environmental Protection Agency (EPA) approved the use of 15 percent ethanol blends (E15) in all light-duty vehicles from model years 2001 or later. Many ethanol producers have been approved by EPA to sell their ethanol for blending into E15, but as of August 2012, only one retailer in Kansas had announced that it has E15 for sale.

International biofuels trade patterns have changed significantly in recent years. Trade with Brazil, the World's other major

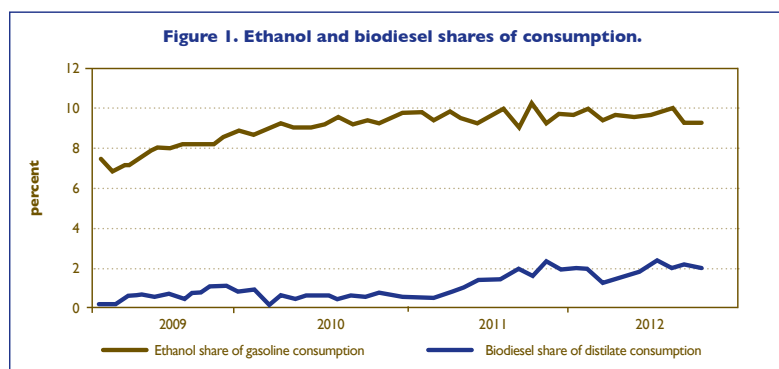
producer of ethanol, shifted during 2010–11 as the U.S. became a net exporter of fuel ethanol in 2010. At the same time imports of Brazilian sugarcane ethanol, which qualifies as an advanced biofuel under the RFS2 program, increased. Sugarcane ethanol is also much more useful for compliance with the California low-carbon-fuel standard than domestically produced corn ethanol because of its significantly lower carbon intensity rating.

Exports of ethanol increased substantially as producers looked abroad for new markets, and Brazil experienced a poor sugar harvest during 2011–12.

Biofuels production uses significant amounts of both corn and soybeans. In the 2010–11 agricultural marketing year, 40 percent of the corn crop and 14 percent of soybean oil production were used to produce biofuels and other products, including distillers grains for use as animal feed. The reduced forecast for corn production in the 2012–13 marketing year led to higher corn prices, which negatively affected the outlook for ethanol production. See the article on grains for more info.

Biofuels production technology continues to improve, both for mature processes, such as corn-based ethanol and vegetable oil-based biodiesel, and for new processes, such as renewable diesel, renewable jet fuel and cellulosic biofuels. However, progress on the commercialization of cellulosic biofuels has been slower than envisioned in 2007, when the RFS2 was enacted. As a result, from 2010 through 2012, EPA exercised its authority to set the mandate for cellulosic biofuels below the targets set in legislation. To date, EPA has not exercised its authority to waive or modify any of the other legislated targets.

For the 2013 year, EPA recently set the mandate for biodiesel at 1.28 billion gallons, exceeding the 1 billion gallon mandate applicable in 2012. Mandates for cellulosic ethanol and other categories of biofuels will depend on forecasts for motor fuels markets and cellulosic ethanol production. ■



Source: U.S. Energy Information Administration, *Biofuels Issues and Trends*, Figures 1 and 6. www.eia.gov/todayinenergy/detail.cfm?id=8430

Reference

AgMRC: www.agmrc.org/renewable_energy

Emerging: Value-added Agribusiness

Dr. Kent Wolfe and Sharon P. Kane, Center for Agribusiness and Economic Development, UGA College of Agricultural and Environmental Sciences

As in recent years, food and fiber industries had a substantial presence in the Georgia economy, encompassing agricultural and forestry production, including support services; food and fiber processing and manufacturing; product inputs; food retail and wholesale trade; and food services.

In 2010 (most recent data available), the total food and fiber sector employed 688,586 Georgia workers and had annual sales just over \$107 billion. This magnitude ranks the total food and fiber sector high among all of Georgia's economic sectors, with over 13 percent of the total employment in the economy (nearly 16 percent of the economy's output) and more than 11 percent of the value added (Table 1). The largest value added sector is food and drink manufacturing, making up over 36 percent of the total and encompassing a wide variety of products.

Value-added agribusinesses represent the prospect for growth in Georgia's food and fiber sectors, many of which depend on consumer spending patterns and popular concerns. Some upcoming trends include the following, which may prove important to Georgia agribusinesses.

As stated by many trend-watchers, vegetables take center stage in 2012, with emerging market potential ranging from the school cafeteria to upscale retail shops. The Culinary Visions® Panel survey shows that all types of vegetables—some in new forms or with child-friendly names—are now an accepted staple for healthy eating. Other predictions have consumers choosing vegetables as the main entrée because they have wide-ranging appeal and health benefits.

According to a recent report by Mintel, the vegetable retail market consists of two distinctly performing categories—fresh

Table 1. Georgia employment, output and value added by industrial sector, 2010.

Sector	Employment #	Output \$millions	Value added \$millions
Agricultural & forestry products	104,685	11,777	4,455
Food & drink manufacturing	65,329	47,122	16,260
Fabric & leather manufacturing	15,489	3,836	997
Wood & paper manufacturing	29,845	11,416	3,316
Production inputs	6,067	3,186	775
Food retail & wholesale trade	136,342	11,958	9,093
Food services	330,828	17,749	9,576
Total food & fiber	688,586	107,044	44,473
Food & fiber percent of economy	13.2%	15.7%	11.2%

Source: Minnesota IMPLAN Group, Inc., IMPLAN System (2010 data and software), 1725 Tower Drive west, Suite 140, Stillwater, MN 55082, www.implan.com, 1997. Calculations by authors.

and processed. Many value added vegetable products fall into the processed category, including canned, bottled, frozen or dried vegetables. In 2011 the total, U.S. retail sales of processed vegetables was \$17.3 billion, which represented a steady growth rate of about 5.3 percent since 2006.

Researchers forecast that the U.S. processed vegetable segment will continue to grow to about \$19.7 billion by 2016. The combined forces of public and private healthy eating campaigns and low levels of vegetable consumption among most consumers create an environment for growth in the vegetable sector. Further market development of the value-added vegetable products might benefit from the upcoming trend of new forms and combinations for vegetables: drying, pickling and canning.

Green, local and sustainability initiatives remain a key part of consumer and agribusiness activities. Terms such as “fresh” and “local” are still effective, while foods considered “hand-crafted” have seen recent growth. Other areas of growth 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. Newly relevant is the shopper that wants to go beyond just local to pure ingredients, quality, freshness and simplicity, regardless of the form.

While economic challenges abound, consumers are still seeking nostalgic food choices, with potatoes, cheese and butter as top choices. Other comfort food preferences include chocolate for women and beef for men.

Though the snack food market has long been considered separate, current food preferences no longer consider snacking as optional, but as a mainstay of a healthy, rounded diet. Today's snacks can be eaten any time of day and aren't the junk foods of the past. The options include fruits, vegetables or snack meats in a variety of forms.

Trending consumer preferences and a new interest in food culture can generate profitable opportunities for existing and new agribusiness enterprises in the food and other related sectors. Small food processors and entrepreneurs have additional market potential as they introduce unique, high-quality, locally produced food products to meet today's consumer demands. ■

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Emerging: Agritourism

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UGA College of Agricultural and Environmental Sciences

Agritourism continues to be a favorite activity for families and people that are looking to relax and enjoy the outdoors with friends and family as well as reconnect with Georgia's agricultural heritage. Families continue to take short excursions and/or day trips, as a means of getting away from the hustle and bustle of everyday life and to spend some quality time with their children. Interestingly, grandparents are even taking their grandchildren to agritourism venues where they can share their farming stories. These underlying factors will continue to drive people to agritourism venues in 2013.

The 2011 Farm Gate Report estimates that agritourism and nature-based tourism generated \$122 million dollars, up significantly from an estimated \$90 million in 2010 (Figure 1). The popularity of agritourism is supported by the fact that new operations are coming online annually all across the state. The wide appeal of agritourism continues to draw visitors, and the industry is set to grow in 2013.

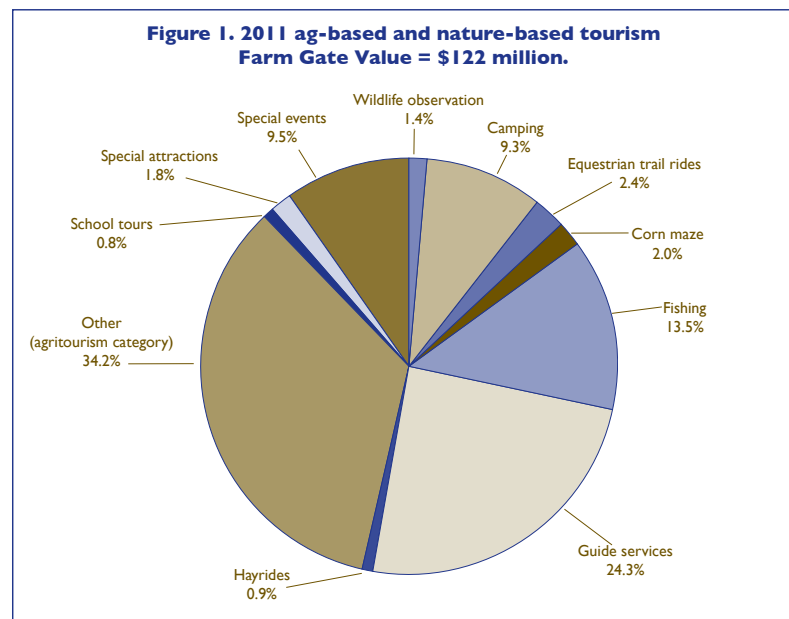
There are three primary economic factors that will impact Georgia's agritourism and nature-based tourism in 2013:

1. Fuel prices

Fuel prices have the potential to positively impact Georgia's agritourism operations. The Energy Information Administration (EIA) projects retail gasoline prices to fall to \$3 per gallon in 2013 due to weaker global demand and continuing declines in crude oil prices.

Consumers have become accustomed to higher fuel prices, and the fact that they are expected to fall in 2013 will make travel seemingly less expensive. In addition, airlines are reducing their fleet size and availability of seats, which has led to an increase in airfares.

As fuel prices fall, making travel by automobile less expensive, local and regional tourism venues will benefit. Leisure travelers will be encouraged to



get in their automobiles and see area attractions, which allows the flexibility to make impulse stops. The fall in fuel prices will somewhat reduce the cost pressure of strained school budgets, resulting in more school field trips.

2. Tax revenue

Reversing past years, the 2013-fiscal year state budget projections suggest that the state's school budget will experience an increase in revenue. The budget calls for increased spending across all the pre-K through high-school programs. The additional educational revenue may free up resources for school field trips. This has the potential to significantly impact agritourism across the state, especially those operations that rely heavily on school field trips. Unless the economic situation deteriorates significantly over the first part of 2013 and tax revenues fall, school field trips will be positively impacted.

3. Unemployment

The economy continues to grow, but at a relatively slow rate. This has led to an easing of unemployment across the state in nonconstruction and related industries.

The anticipated 2012 rebound was positive but incremental, and it is expected to increase by 1.4 percent in 2013. 2013 will be the first year since 2007 with a significant annual gain in employment. This is good news; as more people find jobs, they will experience an increase in disposable household income. This bodes well for the agritourism industry.

School field trips

Counties and schools across Georgia are struggling as the effects of fallen property values persist and state resources have not returned to pre-recession levels. These factors are expected to persist in 2013, and thus retard the growth of school field trips. However, some schools have started to recoup the cost of field trips by increasing student contributions to help cover the total cost of the field trip.

The stagnated growth in school field trip budgets may negatively impact agritourism operations as many operators across the state rely on school field trips to generate awareness, traffic and revenue. Figure 1 reveals that school tours account for 0.8 percent of the revenue generated from agritourism in 2011, down from 1.3 percent in 2010.

Agrotourism, cont'd.

Leisure travelers

The anticipated growth in both employment and wages in 2013 will lead to increased leisure travel by an estimated 1.3 percent, up from 2012. Inbound international travel to the U.S. will increase by 4 percent in 2013 with expenditures growing by 7.1 percent. This is significant since Georgia is one of the top U.S. travel destinations for international travel. This is very encouraging for agritourism operators, as

the growth in leisure travel will outpace Georgia's economic growth. Leisure travelers are looking for getaways that fit with their passions, motivations and what they love to do, so they are increasingly building their trips around festivals and/or food.

Issues and trends

An important issue facing agritourism operators is the need for liability insurance. Operators are having a

difficult time identifying insurers that are willing to insure their venues and associated activities. Access to insurance may be a barrier to entry for some potential agritourism operators.

"Local foods," a newer trend, has the potential to significantly impact Georgia's agritourism growth. The growing interest in local food continues to create new opportunities for agritourism venues as people are looking to connect with and support local farmers. ■

¹This figure does not include hunting-lease revenue figures.

Special: The Impact of the Food Safety and Modernization Act of 2011 Remains Unclear

*Dr. James A. Daniels, Center for Agribusiness and Economic Development,
UGA College of Agricultural and Environmental Sciences*

The Food Safety and Modernization Act of 2011 (FSMA) was the first major overhaul of our food laws in over 50 years, and among other things, was designed to shift the responsibility for the safety and security of our food supply from government regulators to the producers—both domestic and foreign. Passage of the act was widely supported by both consumers and the food industry, who believed it could help to curtail the alarming and costly string of recalls and foodborne illness outbreaks that seem to be increasing in both frequency and severity. The problem is that the major provisions have yet to be implemented, and the full benefits to consumers and costs to producers have yet to be felt almost two full years after the act was signed into law.

The primary impediment to implementation of the act appears to be the costs associated with doing so. The act calls for a significant increase in the number of federal personnel employed in food safety agencies as inspectors, researchers and analysts. The act also calls for a large increase in funding for grants and training, along with a major expansion of inspection programs in foreign countries that are major U.S. suppliers.

However, the ideas of increasing the size of the federal government and associated budget, along with additional federal regulations have not been popular ideas over the past few years. Many feel that the administration has been purposely dragging their heels on the implementation of the act to prevent it from becoming an election issue. If that was the case, then perhaps we will see more progress towards implementation in the coming months, assuming a

resolution to the “fiscal cliff” can be found and the budget paralysis that has created so much uncertainty is resolved.

Another concern is that the increased requirements for all food producers to have a scientifically based food safety program that addresses all likely food safety hazards could prove burdensome to small companies, even to the point that some may be unable to comply and choose to close instead. Some might argue that if a company cannot provide credible evidence that their products have been produced safely, then perhaps they should not be in the food business. In the prevailing political climate, forcing small companies out of business with expanded federal regulations has not been viewed as a popular thing to do. This is an aspect of the full implementation of the act that remains unclear, but it is hoped that training and education will minimize the number of companies that will be unable to meet the new requirements.

One aspect of the act that is frequently overlooked is that it requires a producer’s food safety program to consider both unintentional and intentional hazards, meaning that elements of what we now call a food defense plan will have to be incorporated into the overall food safety program. Prior to FSMA being enacted, federal agencies encouraged, but did not require food producers to have a food defense plan designed to prevent an intentional attack on their facility, their employees or their products. Larger producers have been working on food defense plans for several years now due to demands that they do so by major customers and national retailers.

Fortunately, the federal and state agencies have been working on a wide variety of print and web-based

resources to assist in the development and implementation of food defense plans. A search for the words “food defense” at either the USDA or the FDA websites provides access to the resources developed to date by these federal agencies. Other good sources of information are the various commodity trade associations; many have developed publications and training programs regarding food defense specifically for the products they deal with.

If the pace of the FSMA implementation does get back on track in early 2013 as many expect it to, it would be wise to stay attuned to that process and monitor not only the aspects discussed here, but the hundreds of other provisions that may impact your specific industry or business. The FDA has a specific website dedicated to just the FSMA implementation process, which can be found at the following address: www.fda.gov/Food/FoodSafety/FSMA/ucm250568.htm. ■

Special: Georgia Ag Companies Look Globally for Business Opportunities

Kathe Falls, International Trade, Georgia Department of Economic Development

Outside of the U.S. lies 95 percent of the World's consumers and 92 percent of the globe's economic growth, creating a world of opportunity for Georgia agricultural exporters. One of every three acres on U.S. farms is planted for exports, an indication of the tremendous amount of exporting activity in which agricultural companies are engaged.

The past two years have set records for Georgia exports. Among U.S. states, Georgia leads the nation in exporting wood pulp, poultry, minerals and ores (kaolin), aluminum foil and wire, and textile floor coverings (carpet). Georgia ranks second in exporting paper and paperboard as well as acrylic polymers. Georgia is the nation's 12th-largest exporting state ranked by dollar value of exports.

In June 2012, Georgia combined its export services for agricultural companies with those offered to manufacturers and service providers. Therefore, 2012 is the first year that the Georgia Department of Economic Development (GDEcD) has undertaken an in-depth look at international markets for Georgia's agricultural products. For this analysis, GDEcD used the U.S. Census Bureau's state-level export statistics for HS¹ Chapters 1–24. To identify countries historically purchasing Georgia's agricultural products and products doing well in each market, the research involved the years of 2006 through 2011. All statistics in this article refer to these specific HS chapters and this six-year time span (the timeline). State-level export statistics for 2012 will be released in February 2013.

The leading countries (based on dollar value of exports) that purchase Georgia's agricultural products can be grouped into three tiers. All the countries in these tiers have purchased at least \$200 million in Georgia's agricultural products during the timeline.

Our No. 1 export market is Canada, responsible for 18 percent of Georgia's

Table 1. Georgia's top agricultural exports by value, 2006-2011.

Product	HS Chapters	6 year total
Edible meat/offal (includes poultry)	HS02	\$4.7 billion
Animal feed/waste	HS23	\$1.3 billion
Nuts (ground)/seed/fruit (includes peanuts)	HS12	\$1 billion
Misc. edible preparations (value-added)	HS21	\$727 million
Cereals, flour, etc.	HS19	\$459 million
Edible preparations of meats	HS16	\$458 million
Dairy produce/bird eggs	HS04	\$451 million
Edible fruit and nuts	HS08	\$434 million
Animal or vegetable fats	HS15	\$428 million

Source: Georgia Department of Economic Development.

agricultural exports. Not only has Canada purchased more than \$2.1 billion in agricultural products, but this market has increased 92 percent during the timeline.

Our second leading export market has been China, with its purchases of \$957 million during the timeline. Although China's exports have declined 44 percent during this period, Georgia's agricultural exports to Hong Kong have increased 971 percent. We believe that Hong Kong is a gateway for Georgia's agricultural products into China. In addition to being Georgia's fourth-largest export market for agricultural products, Hong Kong has been Georgia's second fastest-growing export market for agricultural products.

Our third-largest market for agricultural products has been Mexico, which has purchased more than \$810 million in Georgia agricultural products. This market steadily increased its purchases until 2011, when it experienced an 11 percent decline over the previous year.

These top four export markets—Canada, China, Mexico and Hong Kong—make up the top tier accounting for 39 percent of Georgia's total agricultural exports during the timeline.

Russia and Japan make up the second tier of countries, each accounting for between \$330 million and \$381 million, or three percent each, of Georgia's agricultural exports and purchases. Russia has been somewhat consistent in its year-over-year purchases, with a 57 percent increase. While Japan's purchases of Georgia's agricultural exports have

declined 42 percent during the timeline, its 2011 exports increased nearly 50 percent over exports in 2010.

Trinidad and Tobago, Vietnam, Venezuela and the Dominican Republic comprise Georgia's third tier, each purchasing between \$219 million and \$284 million in agricultural products, and each accounting for 2 percent of the market share. Trinidad and Tobago experienced a 127 percent increase during the timeline. Vietnam's increase of 2,543 percent during the timeline clearly makes it the fastest-growing among markets purchasing more than \$200 million in agricultural products from Georgia. Venezuela experienced consistent growth and an increase of 675 percent. Georgia's agricultural exports to the Dominican Republic have had many highs and lows but experienced a 69 percent increase overall.

Table 1 highlights Georgia's top exported agricultural products (HS 1–24) between 2006 and 2011. These overall export numbers provide just one of many considerations that Georgia companies use when selecting target markets. GDEcD can help agricultural companies with an analysis of the export trends for specific HS numbers and identification of key contacts in these target markets. Additionally, federal funding makes export promotion events more affordable for Georgia's small businesses. Contact Shehzin Jafar or Kathy Oxford (404-962-4122) to learn how GDEcD assists Georgia's agricultural exporters. ■

¹The Harmonized Commodity and Description Coding System is an international nomenclature for the classification of products. It allows participating countries to classify traded goods on a common basis for customs purposes. Each chapter is a standardized classification.

Notes

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Notes

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This valuable guide is provided as a companion to the **2013 Ag Forecast** seminar series.

For more information, visit: www.georgiaagforecast.com

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