

2014 Georgia Ag Forecast



THE UNIVERSITY OF GEORGIA
COLLEGE OF AGRICULTURAL &
ENVIRONMENTAL SCIENCES

Introduction

From production to processing, agriculture is the single largest industry in Georgia. It supports the state with jobs, provides Georgians with food and fiber, and contributes 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.

The Center for Agribusiness and Economic Development and the Department of Agricultural and Applied Economics strive to serve Georgians by bringing you the most up-to-date and relevant agricultural and economic information. Our faculty work to deliver quality research and analysis, so you can make pertinent decisions that will enhance your agribusiness operation.

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 eighth annual Georgia Ag Forecast publication. The material presented here represents the best thinking of our economists who work with the various agricultural sectors in our state. Whether you're interested in row crops, livestock, biofuels, agritourism, pollinators or timber, we've compiled the impacts from 2013 and the potential of 2014 for you. We hope the situations and outlooks discussed in this book will help you make informed business decisions for the upcoming year.

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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U.S. and Georgia Economies

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

The 2014 U.S. economic forecast indicates that the economic recovery that began in the second half of 2009 will be sustained. The rate of 2014 GDP growth (2.3 percent) will be higher than in 2013 (1.6 percent), but below the average of the last 50 years (3.1 percent).

The U.S. is well positioned for slight acceleration in growth due to extensive restructuring of the private sector, including the cleanup of the financial sector, the aggressive write off of bad debts, deleveraging by consumers and a more favorable balance of supply and demand for residential and non-residential properties.

The U.S. economy will remain vulnerable to economic shocks and/or policy mistakes as well as self-inflicted wounds caused by Congress damping the moderate momentum exiting from 2013. The primary risks likely to trigger a new recession are familiar: mistakes in federal fiscal and/or monetary policies, oil price shocks and fallout of financial panics. The probability of recession is 30 percent, which is lower than the 40 percent recession probability estimated at this time last year.

In 2014 private, final, domestic demand rather than fiscal stimulus or net exports will be the primary driver of U.S. GDP growth. The government sector will subtract from—rather than add to—GDP growth. Since federal fiscal policy will be restrictive, the Federal Reserve's monetary policy will remain supportive of growth in private demand by maintaining a monetary policy stance that is stimulative—characterized by near zero short-term policy interest rates.

Nonetheless, the Federal Reserve will wind down its purchases of treasuries and mortgage-backed securities—during the third quarter—in 2014. Meanwhile, the federal government has yet to effectively address its massive structural budget problems, which is what is needed to move the U.S. economy from its subpar growth

trajectory to an average, or above average, growth trajectory.

Real consumer spending will rise by 2.2 percent in 2014 resulting in substandard GDP growth. The restrained growth in consumer spending can be partially attributed to current and future consumer confidence. Moreover, many households will still be deleveraging (paying down debt) and will be reluctant to take on risk.

GDP growth of our major trading partners will strengthen in 2014, increasing exports but not as fast as import growth. While the banking and sovereign wealth problems in the European Union are unlikely to cause a major financial panic in 2014, its growth prospects do not look robust.

A second problem is that there has been a significant deceleration of growth of many emerging markets, especially in countries that delayed major structural reforms. The deceleration of emerging market growth, which is due to both structural and cyclical factors, reduces prospects for U.S. manufacturers to export goods to the developing world in 2014.

What does this mean for Georgia in 2014? Georgia's economy will continue to recover from the Great Recession, but the pace of growth will be modest and the risk of recession is the same as for the nation (30 percent). Georgia's inflation-adjusted GDP is expected to increase by 3 percent, up 0.7 percent from 2013. Georgia's GDP growth rate will be 0.7 percent higher than the 2.3 percent rate estimated for U.S. GDP in 2014. The positive differential reflects (1) the housing recovery; (2) strategic shifts in the state's economic development strategy; and (3) more supportive demographic forces.

The state's nominal personal income will grow by 5 percent in 2014, which is slightly higher than the 4.2 percent gain expected for the U.S. Georgia's nonfarm employment will rise by 1.8 percent in 2014, which exceeds the 1.5 percent gain estimated for the U.S.,

but equals the pace of job growth estimated for Georgia in 2013.

Two hurdles will hold Georgia back in 2014: federal government spending cuts and changes in Federal Reserve policy. In 2014, federal policymakers are likely to address imbalances in federal government financing and the credit markets in ways that do more damage to Georgia than to the nation as a whole.

Inflation

If oil prices remain relatively steady, consumer price inflation will increase by 1.5 percent in 2014, compared to 1.4 percent in 2013. There are no signs that inflation is or will soon be a problem, and the usual drivers of inflation will not be much more intense in 2014 than in 2013. For example, the pace of 2014 GDP growth will be well below average and only slightly higher than in 2013. Also, consumer spending and employment will both grow moderately.

Despite the lack of a good substitute, the U.S. dollar could gradually lose some of its status as a reserve currency or safe haven. China and others with large foreign currency holdings may choose to gradually diversify their portfolios away from U.S. dollar assets.

The outlook for inflation beyond 2015 is considerably less sanguine. The magnitude of recent monetary stimulus increases the risk of inflation. Also, the federal debt has skyrocketed in absolute terms as well as in terms of its percentage of GDP, which creates pressure to monetize the debt.

Over the next decade it's likely that inflation will exceed the 3 percent average of the last 30 years. 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.

Jobs

Georgia suffered disproportionate job losses during the Great Recession and so far, has recovered more slowly. Georgia lost 340,000 jobs, or 8.1 percent of the state's pre-recession employment peak, compared to 6.3 percent for the country. By October 2013, Georgia had recovered only 65 percent of those lost jobs compared to 78 percent nationwide.

The result is that Georgia is still down 118,000 jobs. Fortunately, Georgia's employment will grow by 1.8 percent in 2014, and if it is sustained, it will replace the jobs it lost by mid-2015. The U.S. will replace its lost jobs by mid-2014, or about one year ahead of Georgia.

Private sector job growth will be very balanced in 2014. The fastest job growth will occur in construction, followed by professional and business services, mining and logging. Education and health services, information, and leisure and hospitality will see above-average gains.

Below-average job growth is expected for trade, transportation, utilities and manufacturing. Positive, but slow job growth is projected for financial activities. In contrast, job losses will continue in the government sector, which is the only major economic sector expected to lose jobs in 2014.

Since the turn of the millennium, Georgia has lost 204,000—or four out of every ten—manufacturing jobs. The purge ended in 2010. In 2012 and 2013, we've seen many major project announcements, bolstering prospects for job growth in aircraft, automobile, construction equipment and flooring manufacturing. Many of these promised jobs will be filled in late 2013 or in 2014. Cyclical economic recovery in combination with more competitive economic development incentives will help Georgia attract manufacturers in 2014. However, the incoming data shows that

United States and Georgia baseline forecast, 2009-2014.

United States	2009	2010	2011	2012	2013	2014
Gross Domestic Product, Billions of 2009\$	14,417.9	14,779.4	15,052.4	15,470.7	15,718.2	16,079.8
Percent Change	-2.8	2.5	1.9	2.8	1.6	2.3
Nonfarm Employment (Millions)	130.9	129.9	131.5	133.7	135.7	137.8
Percent Change	-4.4	-0.7	1.2	1.7	1.5	1.5
Personal Income, Billions of 2009\$	12,082.1	12,232.9	12,673.5	12,964.7	13,169.9	13,520.3
Percent Change	-2.7	1.2	6.1	2.3	1.6	2.7
Personal Income, Billions of \$	12,082.1	12,435.2	13,191.3	13,743.8	14,114.9	14,707.7
Percent Change	-2.8	2.9	3.6	4.2	2.7	4.2
Civilian Unemployment Rate (%)	9.3	9.6	8.9	8.1	7.6	7.2
CPI-U, Annual Percentage Change	-0.4	1.6	3.2	2.1	1.5	2.0

Georgia	2009	2010	2011	2012	2013	2014
Gross Domestic Product, Billions of 2005\$	353.8	358.8	366.3	374.0	382.6	394.1
Percent Change	-5.4	1.4	2.1	2.1	2.3	3.0
Nonfarm Employment (Thousands)	3900.9	3861.2	3901.4	3952.8	4024.6	4098.8
Percent Change	-5.4	-1.0	1.0	1.3	1.8	1.8
Personal Income, Billions of \$	326.0	335.4	353.1	365.7	378.9	397.9
Percent Change	-4.3	2.9	5.3	3.6	3.6	5.0
Housing Permits, Total	18,228	17,265	18,493	24,350	34,100	45,200
Percent Change	-48.5	-5.3	7.1	31.7	40.0	32.6
Unemployment Rate (%)	9.8	10.2	9.9	9.0	8.5	8.0

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

manufacturing jobs are not coming back very quickly.

The state added 5,600 manufacturing jobs in 2011; 4,000 jobs in 2012; and an estimated 2,100 jobs in 2013. Manufacturing employment will rise by 4,100 jobs in 2014. That will sustain the cyclical recovery in manufacturing, but at that pace it would take 50 years to replace the manufacturing jobs that were lost. To become a center of manufacturing activity, Georgia will need to develop a better-educated and more highly skilled, blue-collar workforce due to increasing manufacturing skill requirements.

Housing recovery

Housing and real estate development are one of the main factors that will help Georgia's economy outperform the nation's economy in 2014. Georgia gets a two-for-one from the housing recovery since homebuilders and real estate agents benefit directly and

because of an increased demand for goods produced by our large, building material and forestry industries. In 2014, the number of single-family housing starts for new construction will rise by 36 percent. U.S. housing starts will rise by 25 percent. Georgia's housing market is responding to a more favorable balance of supply and demand.

Increased demand for housing will come mostly from 1.8 percent job growth. Those new jobs, slightly bigger paychecks and appreciating home values will give more people the ability, and the confidence, to buy homes. This growth will sustain the housing market's recovery. Mortgage rates will remain a tremendous bargain from a historical perspective, but mortgage rates have risen above their recent historic lows and will continue to move higher as the Federal Reserve winds down its purchases of mortgage-backed securities and treasuries.

U.S. and Georgia, *continued*

Supplies of new homes are still constrained by years of underbuilding. Plus, there's a scarcity of listings of existing homes. That's partially because so many of Georgia's homeowners are underwater on their mortgages and are therefore unlikely to put their homes up for sale. It's especially troubling that the negative equity is concentrated in the low price, or starter home segment of the market. That hurts the trade-up market. Also, many homeowners realize they will not qualify for a new mortgage, so they will stay put.

In Georgia, another reason why listings are scarce is that many homeowners are simply unwilling to accept today's depressed home prices. Georgia's homeowners saw very steep declines in home prices in the wake of the housing bust, but did not see a run-up in home prices during the housing boom. For long-time homeowners, today's prices mean real losses rather than the paper losses incurred in states where home prices surged during the housing boom.

Despite the fact that Georgia home prices have recently risen very quickly, listings are still somewhat scarce. Nonetheless, the current housing situation does not resemble anything close to a true "sellers" market. Home prices are still well below the levels needed to get homeowners who would like to sell to consider putting their homes on the market. Even after factoring in recent home price gains, Georgia home prices have only recovered to where they stood at the turn of the millennium.

Once home prices rise above reservation prices, existing homes will come onto the market in very large numbers, preventing a sellers market from developing. I suspect there's a huge, pent-up demand to sell, but not at today's depressed prices. This is still a buyer's market.

One reason home prices are rebounding is that the huge inventory of distressed homes is dissipating. There are two reasons why distressed inventory disappeared so quickly: (1) Georgia is a non-judicial foreclosure state, which allows for faster resolution, and (2) Investors have been

especially keen to purchase distressed properties in the Atlanta metropolitan area because the home price declines here were way overdone.

It comes as no surprise that the recent rebound in home prices is causing credit conditions to ease. However, since appraised values lag market values, low appraised values will continue to hold back conventional lending. In addition, many of Georgia's homeowners with mortgages still owe more on their mortgages than their homes are worth, which severely limits the availability of financing. These homeowners can't absorb the costs associated with selling their home nor make a down payment on a new home. So, the trade-up market for homes is not functioning normally.

Existing single-family home prices will rise by 8 percent in Georgia in 2014 with lower-priced homes appreciating fastest. That's partially because the lowest tier has the most ground to make up and remains the furthest from full price recovery. But it also reflects investors' interest in purchasing inexpensive single-family homes for use as rental properties.

Economic development

In 2012, Georgia's leaders passed key economic development legislation designed to make Georgia more competitive, including the creation of a large, deal-closing fund and sales tax exemptions for energy used in manufacturing. It looks like the 2012 legislative session was a game changer.

Because we now have better economic development incentives, we've seen an increased number of relocation and expansion projects that will provide momentum to Georgia's economic growth in 2014 like Baxter International's facility, GM's IT Innovation Center, and Engineered Floors' manufacturing and distribution facilities. We've also seen project announcements that will deliver substantial numbers of high-quality jobs at headquarters operations, including PulteGroup, Air Watch, Porsche, Carter's, Spanx and Mitsubishi Electric.

Additionally, several IT companies have announced major projects, including Ernst & Young, CBS Corporation and Infosys. It looks like healthcare IT (and life sciences more generally) is an emerging industry that promises to create thousands of high-paying jobs in Georgia over the next decade, assuming our people have the skills they need to perform such jobs.

It's very encouraging that our review of recent economic development announcements issued by the Office of the Governor and the Georgia Department of Economic Development shows that we are closing many deals in industries in which Georgia has the ability to produce at low opportunity and marginal costs.

Specialization in activities where Georgia has comparative advantage bodes extremely well for sustained success of companies that received discretionary incentives, thereby enhancing the prospects for Georgia's long-term economic growth. Logistics, transportation, distribution, warehousing, information technology, transactions processing, headquarters operations, and several professional and business services are good examples of industries where Georgia competes effectively.

Demographics

Demographic forces are a third factor behind Georgia's improving economic performance. For decades, Georgia depended on a growth model that was based on high levels of in-migration, which stopped working during the Great Recession and was slow to recover. In fact, household formation dropped to its lowest levels since the 1940s.

However, job growth and the housing recovery will increase geographic mobility in 2014. In-migration will begin to rebound strongly. Also, the birth rate will rise as households become more confident in the current situation and their expectation for the future. Population growth therefore will be a much stronger driver of the state's GDP in 2014 than it was from 2008 to 2013, but it will still be less powerful than in prior decades.

Federal spending cuts

One of the main challenges to Georgia's growth in 2014 will be cuts in federal spending. Our analysis shows that Georgia's economy will be vulnerable to the restructuring of our federal government. We expect the economic headwind from restructuring our federal government to remain strong for at least a decade.

Federal spending accounts for 6.9 percent of Georgia's GDP, which exceeds the U.S. average (5.3 percent). It's important to understand that Georgia's over-dependence on federal spending is due solely to the presence of many large military bases—defense spending accounts for 5.2 percent of Georgia's GDP compared to only 3.5 percent of U.S. GDP. In contrast, nondefense spending accounts for only 1.7 percent of Georgia's GDP, which is significantly below the U.S. average. Communities within Georgia that depend economically on military bases were hit hard by the default budget cuts mandated by the federal spending sequester.

Going forward, the damage to Georgia

will depend on what lawmakers decide to cut. For example, Georgia will continue to get hit very hard if the federal spending cuts continue to be skewed towards defense spending, or towards other discretionary areas of the federal budget such as the CDC. In 2014, we believe that the cuts will continue to focus on discretionary spending and especially on defense spending, which will be tough on Georgia's economy.

In contrast, Georgia would take a below average hit if the focus of federal restructuring were to shift from the agency budgets towards the entitlement programs such as Social Security, Medicare and Medicaid. We believe that our federal lawmakers will ultimately focus on restructuring these very popular entitlement programs, but that's probably not going to happen in 2014.

Federal Reserve spending cuts

A second factor that will be a slightly stronger economic headwind for Georgia than for the nation as a whole is that we expect the Federal Reserve to let up on

the gas pedal in 2014. We do not expect an actual hike in short-term policy interest rates, but we do expect the Fed to taper its purchases of mortgage-backed securities and treasuries, which is often referred to as quantitative easing.

That plus a slight investor-driven increase in interest rates constitutes a slightly stronger headwind here than for many other states because Georgians carry relatively more debt and have relatively less savings. Plus, interest-sensitive economic sectors such as housing will have a relatively greater impact on Georgia's overall growth than the nation's overall growth.

Summary

Georgia is making progress. It helps that Georgia's political leaders enacted some changes to make our state more competitive, attracting big economic development projects again. Moderate GDP growth, growth in the housing market, rising employment, population growth and the economic development initiatives will all positively impact Georgia's economy in 2014.

U.S. and Georgia Farms

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Farm balance sheets at the national and state levels are expected to reflect improvements of financial conditions in 2013. On the asset side, the national and local farmland markets continued to experience favorable conditions this year as average market values increased over their 2012 levels (Figure 1). In Georgia, the annual appreciation rate is 2.86 percent (from \$3,500/acre in 2012 to \$3,600/acre in 2013), which is relatively modest compared to the national appreciation rate of 9.43 percent (from \$2,650 to \$2,900).

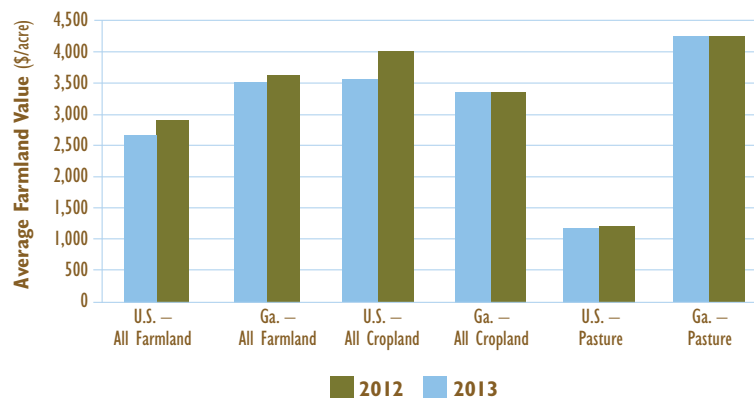
Notably, not all areas in the Southeastern region experienced the same trend. As the regional average remains unchanged, certain states like South Carolina and Florida experienced declining average farmland values between 2012 and 2013.

Average cash rents for cropland also increased during the same period for both Georgia and U.S. farms. The national annual appreciation rate for all cropland rents was 8.8 percent between 2012 and 2013. Average rental rates for irrigated and nonirrigated cropland in the U.S. increased by 8.0 percent and 8.7 percent, respectively, during the same period (Figure 2).

Georgia cash rents only managed to post a small increase of 0.5 percent between 2012 and 2013—a result of offsetting trends in rental rates for the two types of cropland. The state's average rental rate for irrigated cropland posted a decline of 2.8 percent while an 8.8 percent growth was registered for average non-irrigated cropland rents. Pasture rents did not experience much volatility. National average rents for pasture only increased by \$0.50/acre (from \$11.50 in 2012 to \$12 in 2013). Georgia pasture rental rates remained unchanged at \$24/acre over the same period.

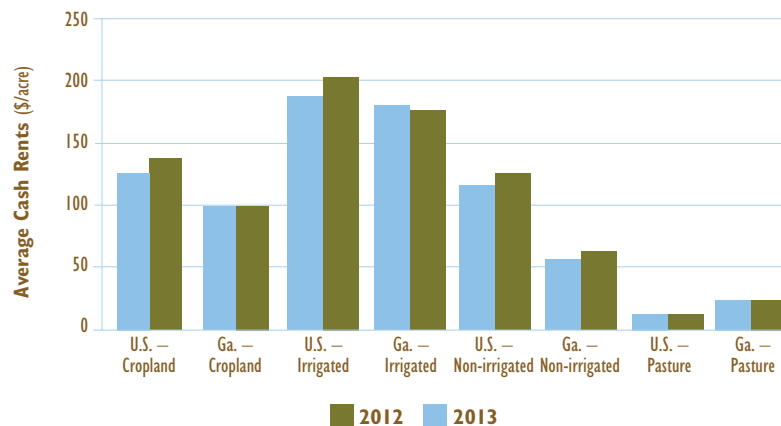
Overall, the favorable conditions in the farmland market may be expected to persist beyond 2013. In Georgia, this may

Figure 1. Average farmland values (\$/acre) for U.S. and Georgia farms, 2012-2013.



Source: National Agricultural Statistics Service, U.S. Department of Agriculture.

Figure 2. Average cash rents (\$/acre) for U.S. and Georgia farms, 2012-2013.



Source: National Agricultural Statistics Service, U.S. Department of Agriculture.

be possible through the resurgence of the influence of non-farm factors on farmland values as analysts foresee a revival of a stronger demand for land for commercial, recreational and residential purposes as the state economy recovers.

The liabilities section of the national and state balance sheets also reflects positive trends in 2013. On the lending side, results of the Federal Reserve Bank of Atlanta's periodic senior loan officer opinion survey

on bank lending practices conducted in July 2013 indicate an optimistic financial outlook.

Specifically, the survey reveals that banks have eased their lending standards and continue to expect stronger demand for all types of loans. These banks foresee a stronger demand for loans in most categories, including agricultural loans, during the coming months. Increasing competition among lenders has been cited

as a motivation for lenders to relax their lending standards.

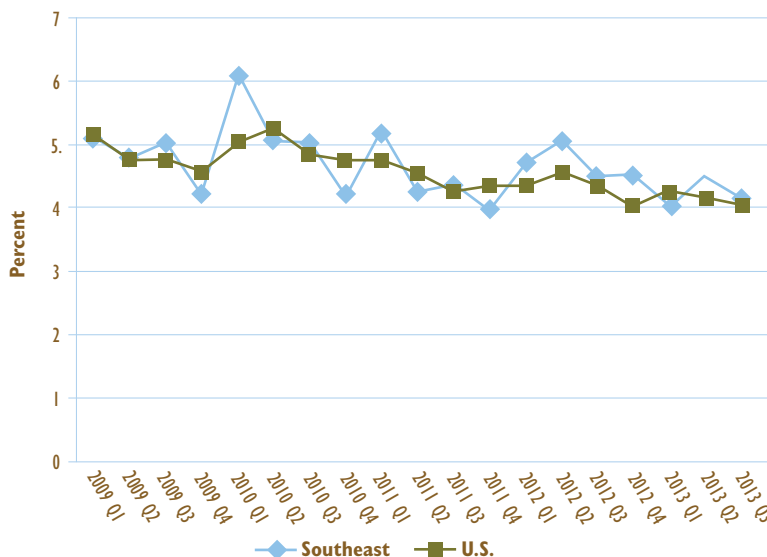
The Federal Reserve Bank of Kansas City reports a shifting trend in agricultural lending activities in 2013 where larger, commercial banks are starting to account for a larger share of farm loan disbursements. Analysts attribute this trend to larger loan requirements of farm producers facing rising production costs and the larger banks' greater flexibility to offer more attractive loan terms.

Realized and expected increases in farm loan activity at both the local and national scenes may also be attributed to further declines in interest rates. Figure 3 presents plots of the weighted average interest rates for farm loans collected at the national and regional (Southeast) levels. As of the third quarter of 2013, the regional and national average interest rates for farm loans both stood at close to 4 percent.

Current low interest rates for farm loans have been attributed to the strong competition among lenders, the farm sector's sustained positive performance indicators and solid repayment rates experienced by lenders among their farm borrowers. On the latter factor, delinquency rates for farm loans reached their lowest levels in 2013. Specifically, delinquency rates of 2.27 percent for farm real estate loans and 1.37 percent for farm, non-real-estate loans (recorded as of the second quarter of 2013) have been the lowest since the first quarter of 2009 and fourth quarter of 2008, respectively.

Meanwhile, the Federal Open Market Committee has kept the target range for the federal funds rate at zero to 0.25 percent and intends to retain the rate at such range as long as the national unemployment rate exceeds 6.5 percent. As the federal funds rate influences other loan rates, farm borrowers can continue to expect most interest rates to remain low.

Figure 3. Quarterly weighted average interest rate on farm loans for the U.S. and Southeast region, 2009-2013.



Source: Agricultural Finance Databook, Federal Reserve Bank of Kansas City.

As farm borrowers continue to maintain good repayment records and the farm asset appreciation trend continues, the farm sector's debt-to-asset and debt-to-equity ratios could reach historic lows in 2013. Beyond this year, the farm sector will continue to prudently keep these measures low, just as it has done for so many years now.

Inputs and Production Expenditures

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Net farm income in 2013

Net farm income in 2013 is forecast to increase 6 percent to \$120.6 billion, largely due to expectations of record crop production. This would be the second highest inflation-adjusted amount in 40 years, being surpassed only by 2011's record value.

Net cash income is forecast to decline, however, by more than 10 percent from 2012. Unlike net farm income, net cash income does not account for capital consumption, change in inventories or non-money income.

The value of livestock production is expected to increase in 2013, with receipts increasing nearly 4 percent. The projected gains result mostly from expectations of higher prices.

Crop receipts are forecast to decline by more than 5 percent in 2013 (from 2012), which would be the first decline since 2009. Nevertheless, the value of crop production is expected to rise nearly 3 percent, with increases boosting anticipated year-end crop inventories.

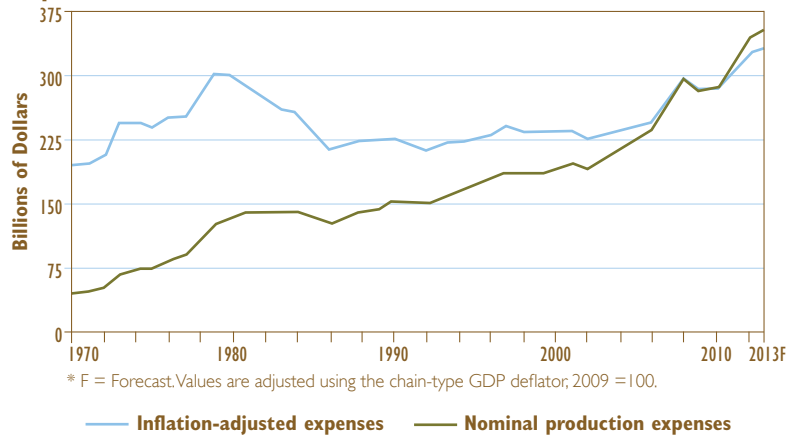
At \$354 billion, total expenses are projected to increase \$13 billion in 2013, continuing a string of large year-to-year increases since 2010. In both nominal and inflation-adjusted dollars, 2013 production expenses are expected to be the highest on record (Figure 1).

Increases in farm asset values are expected to continue to exceed increases in farm debt, leading to expectations of another new, record high for farm equity.

Farm production expenses

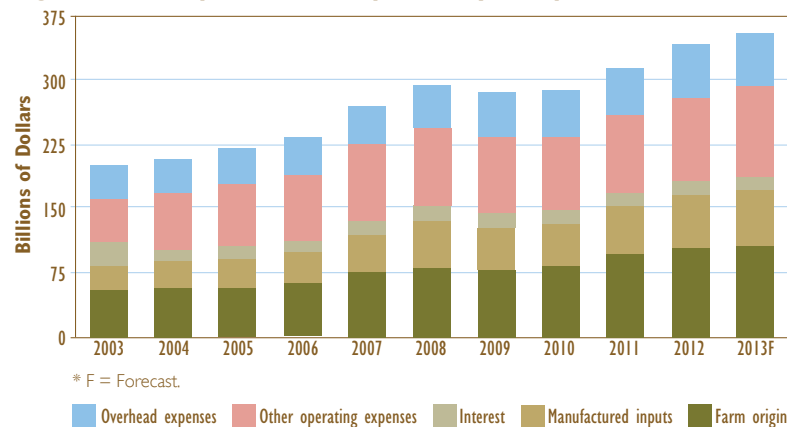
The projected increase of \$13 billion in total expenses for 2013 continues a string of recent annual increases. The expected rise in 2013 is less than half of the \$29 billion rise in 2012 and much less than the \$25 billion rise in 2011. Total expenses in 2013 will amount to 75 percent of gross farm income.

Figure 1. Nominal and inflation-adjusted farm production expenses, 1970-2013F.*



Source: Farm Income and Wealth Statistics, Economic Research Service, U.S. Department of Agriculture – Aug. 27, 2013.

Figure 2. Farm production expenses by component, 2003-2013F.*



Source: Farm Income and Wealth Statistics, Economic Research Service, U.S. Department of Agriculture – Aug. 27, 2013.

For the last decade, expenses for both farm-origin and manufactured inputs have increased 106 percent, while other operating and overhead expenses have increased 60 percent (Figure 2). Farm-origin expenses, such as feed and purchased livestock, and those for manufactured inputs, such as pesticides and fertilizers, now constitute 48 percent of total production expenses.

A steady increase in prices rather than higher quantities of inputs is the biggest factor in rising production expenses since 2003. Two major livestock expenses—feed and livestock purchases—are projected to rise 3 percent in 2013. The feed expenses are slated to rise 4 percent because feed prices remained relatively high during the preharvest quarters. Feed costs began to

subside during the fourth quarter of 2013. The prices-paid index for complete feeds has fallen 10 percent in the past year. Feed costs are expected to decline further because of the projected drops in the prices of corn and soybeans.

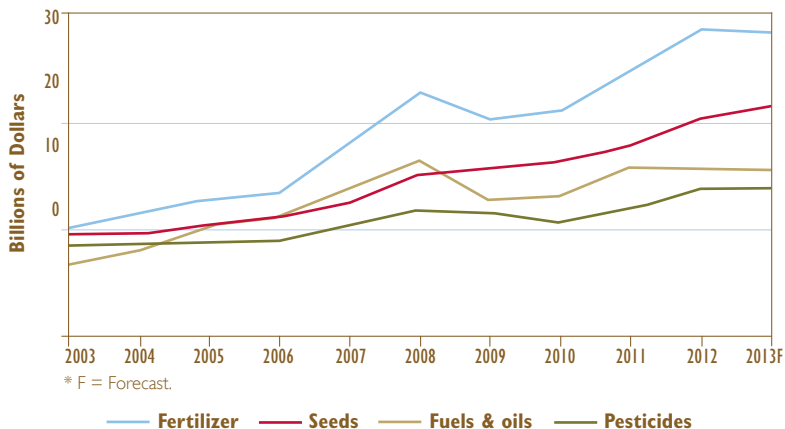
Despite a projected 9 percent increase in 2013 crop output, the principal crop-related expenses are also expected to rise more slowly than in the past. Together, they are forecast to increase 1.5 percent, with seed and pesticide expenses rising and fertilizer expenses declining.

The upward movement in prices paid for crop inputs was the major reason for increasing expenses during prior years. The prices-paid index for seed is forecast to rise more than 5 percent for 2013. Only one-of-eight major fertilizers has risen in price in the past year, partly because the price of natural gas has fallen over the last two years. Even with natural gas prices rising in 2013, the turnaround is not expected to immediately translate into higher fertilizer prices. The fuels and oils expense is forecast to decrease more than 1.5 percent due to the slight declines in refiner acquisition costs (RAC) and planted acres (Figure 3).

2014 outlook

Production expenditures for Georgia farmers are expected to increase at approximately the same rate as inflation in 2014—about 3.5 percent to 5 percent. No particular manufactured inputs should dominate the conversation. Sticker shock may occur on farm tractors and self-propelled combines/harvesters, but the value of disposable inputs (seed, fuel, feed, fertilizer, chemicals, and animal or avian health products) will remain in check. The numbers game (head of livestock, acres of crops, etc.) will dictate the total expenditures spent by Georgia farmers in 2014.

Figure 3. Principal crop-related and fuel/oil expenses, 2003-2013F.*



Source: Farm Income and Wealth Statistics, Economic Research Service, U.S. Department of Agriculture – Aug. 27, 2013.

Row Crop Net Returns

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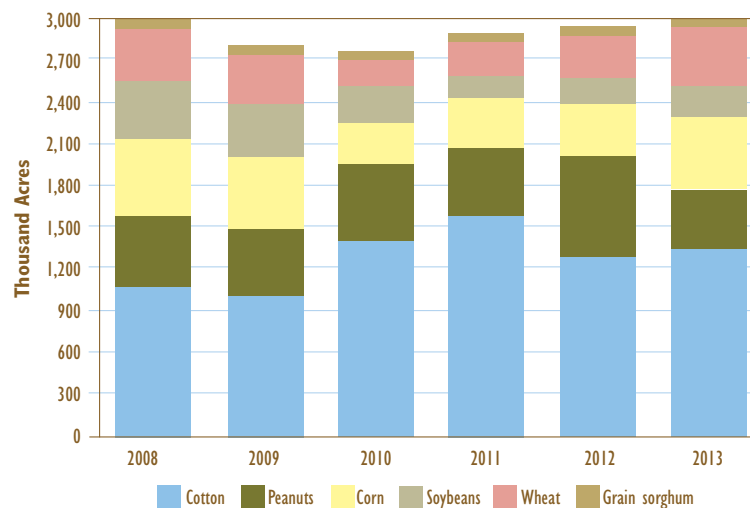
As of December 2013, commodity prices for the major row crops grown in Georgia are down from the same time last year, except peanuts. Peanut prices are up slightly from the low prices seen following the peanut surplus that resulted from record yields and high acres in 2012. Corn prices are down significantly as a result of anticipated record U.S. production this year. Soybean and wheat prices are also down. Cotton prices are down slightly due to weak demand and large global supplies.

From an input standpoint, demand for fertilizer is expected to be down, meaning lower prices. Furthermore, diesel fuel prices are also expected to be down. However, margins will be tight due to the lower expected commodity prices. Growers need to thoroughly evaluate expected prices, yields and costs before determining what to plant in 2014. Planting decisions should also be based on historical 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 2008 through 2013. Producers' planting decisions in 2013 resulted in an acreage shift away from peanuts, primarily into corn and cotton. Georgia producers decreased planted peanuts by 305,000 acres, while corn acres increased by 165,000 and cotton increased 70,000 acres. Georgia producers planted more of their acres to wheat (up 110,000 acres) and soybeans (up 10,000 acres) than they did in 2012. The large increase in wheat acres may also be a result of double-cropping with cotton or soybeans. Grain sorghum acres were down 5,000 acres.

Table 1 shows preliminary estimates of how net returns are likely to compare for Georgia row crops in 2014. Both non-irrigated and irrigated expected prices, yields, income, costs and net returns are shown for comparison.

Figure 1. Planted acres of selected row crops in Georgia.



Source: Farm Service Agency and National Agricultural Statistics Service, U.S. Department of Agriculture.

Expected yields and variable costs are based on adjustments made to the 2013 UGA enterprise budgets for corn, cotton, grain sorghum, peanuts, soybeans and wheat. The UGA Enterprise Budgets and Crop Comparison Tool may be accessed at <http://www.ces.uga.edu/Agriculture/agecon/agecon.html> or by contacting your local UGA Extension agent. The 2014 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 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 of the table). The

breakeven yield is the yield needed to cover variable costs given the expected price.

The expected price for Georgia's major row crops is found in the second column of the table. The expected prices are estimates based upon 2014 harvest time futures prices and adjusted for expected basis, except for peanuts, as of December 2013. The expected peanut price is an estimate of what contract prices may be at the beginning of 2014. Seasonal average prices may differ.

Producers should consider forward pricing a portion of their production at prices that have the highest probability of profit. The breakeven prices and yields shown do not include returns to land (land rent) and management (payment to the producer). A producer should also account for these costs when selling their crop.

Relative net returns for non-irrigated production appear to favor peanuts and cotton, followed by corn. However, yield uncertainty on non-irrigated corn makes production more risky. Irrigated production appears to favor cotton, peanuts and soybeans. Cotton acres are likely to increase slightly or remain about the same as in

Table 1. Per acre net return above variable cost with breakeven price and yield.

Non-irrigated production							
	Expected price ¹	Expected yield per acre	Income per acre	Variable costs per acre ²	Net return per acre ²	Breakeven price ²	Breakeven yield per acre ¹
Corn	\$4.60/bu	85 bu	\$391	\$295	\$96	\$3.47/bu	64 bu
Cotton	\$0.75/lb	750 lb	\$563	\$420	\$143	\$0.56/lb	538 lbs
Grain sorghum	\$4.15/bu	65 bu	\$270	\$235	\$35	\$3.62/bu	57 bu
Peanuts	\$450/ton	3,200 lb	\$720	\$555	\$165	\$347/ton	2,467 lbs
Soybeans	\$10.80/bu	30 bu	\$324	\$245	\$79	\$8.17/bu	23 bu
Conventional wheat	\$5.65/bu	55 bu	\$311	\$195	\$116	\$3.55/bu	35 bu
Intensively managed wheat	\$5.65/bu	75 bu	\$424	\$305	\$119	\$4.07/bu	54 bu
Irrigated production							
	Expected price ¹	Expected yield per acre	Income per acre	Variable costs per acre ²	Net return per acre ²	Breakeven price ²	Breakeven yield per acre ¹
Corn	\$4.60/bu	200 bu	\$920	\$633	\$288	\$3.16/bu	138 bu
Cotton	\$0.75/lb	1,200 lb	\$900	\$520	\$380	\$0.43/lb	667 lbs
Grain sorghum	\$4.15/bu	100 bu	\$415	\$355	\$60	\$3.55/bu	86 bu
Peanuts	\$450/ton	4,500 lb	\$1,013	\$665	\$348	\$296/ton	2,956 lbs
Soybeans	\$10.80/bu	60 bu	\$648	\$320	\$328	\$5.33/bu	30 bu

¹ Prices are 2014 harvest time futures price as of December 2013, adjusted for expected basis. Peanut price is expected contract price. Season average prices may vary. This analysis shows "relative" returns for comparison and ranking only.

² Excludes hand weeding, land rent, fixed costs and any custom harvesting, storage, hauling, etc., if necessary.

Due to volatility in the fertilizer and fuel markets, variable costs could change ± 5 percent.

Source: Data based on authors' revisions of the 2013 UGA Enterprise Budgets for Corn, Cotton, Grain Sorghum, Peanuts, Soybeans and Wheat.

2013. Peanut acres are likely to increase in 2014. Corn acres are expected to decrease and soybean acres are expected to increase. Wheat and grain sorghum acres are likely to remain the same.

Cotton

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With prices below 80 cents, cotton acreage is not likely to increase in 2014. If U.S. and world production is down, this should provide some support for prices—albeit mitigated by large stocks. If U.S. and world production increases, downward pressure will also be added on price unless demand shows marked improvement.

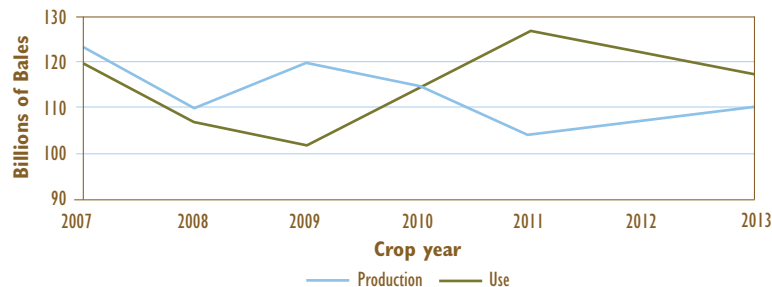
U.S. situation

After rebounding in 2011, U.S. cotton acreage declined two consecutive years in 2012 and 2013. Since 2009, acreage has seesawed between 9.15 million and 14.74 million acres, due to occasional low-price years and competitive net returns from corn and soybeans.

The 2013 crop is estimated at 13.11 million bales with an average yield of 808 pounds per acre. Approximately 25 percent of acreage planted was abandoned due to drought (accounted for mostly by Texas at 42 percent). Persistent drought in Texas cast a shadow of doubt over U.S. production during 2013. This uncertainty was one reason why prices were able to maintain the 80 to 85 cent area or better for much of the 2013 crop. Conditions and the production outlook improved late in the 2013 season, however. Currently, cotton prices (Dec14 futures) are not particularly attractive (around 77 cents per pound), but corn and soybean futures prices are also less than for 2013.

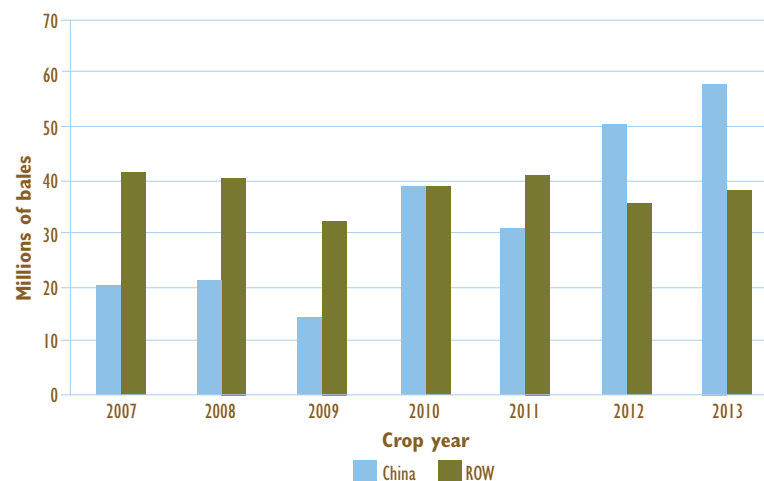
U.S. cotton exports are projected at 10.4 million bales for the 2013 crop year, down from 2012's crop of 13 million bales. Sales have generally been good—lower exports in-part reflects less available supplies. If U.S. production increases for 2014 (depending on acreage planted, harvested and yield), export supplies will increase, but sales will be tempered by foreign production and large world stocks.

Figure 1. World cotton production and use, 2007-2013.



Source: U.S. Department of Agriculture.

Figure 2. Ending stocks of cotton, China and Rest of the World (ROW)



World situation

World cotton production for 2013 was 117.22 million bales—down 5.87 million bales or 4.8 percent from 2012 (Figure 1). Production has trended down since 2011. During this same time, use (demand) has begun to slowly recover from the low in 2011, but production still outpaces demand annually by roughly 6.5 million bales. Production has been higher than use for four consecutive years (2010-2013) compared to use outpacing production for each of the prior five years (2005-2009).

It is projected that at the end of the 2013 crop-marketing year, world stocks will be a record 95.71 million bales. Large stocks typically cause weakening prices, but this

also depends somewhat on which countries have the stocks and the disposition of those stocks. Due in part to high cotton prices, demand (use) declined 10 percent for the 2011 crop year. This decline in use, combined with a rebound in production in 2011 and 2012, resulted in a buildup of stocks.

Use has improved but is still 10 million bales or more below highs in 2006 and 2007. Demand grew a respectable 4 percent in 2012 but is expected to grow only 2.3 percent for the 2013 crop year. Unless demand improves more rapidly or supply shocks take place, record stocks threaten to hang over the market for several years.

China

The 2013 Chinese cotton crop is projected by the U.S. Department of Agriculture to be 32.5 million bales—2.5 million bales less than 2012. Other sources have reported the crop could be less than 30 million bales. If realized, it would be the smallest Chinese crop since 2005. To date, this possibility has yet to be reflected in 2013 and 2014 crop prices.

Typically, China's annual use of cotton is 10 million to 15 million bales more than what they produce. For this reason, China is the largest importer of cotton and a major buyer of U.S. cotton. China also likes to hold a relatively large amount of stocks—presumably to provide stability of supplies for its large mill industry.

At the end of the 2010 crop-marketing year, however, China's stocks were a very low 10.6 million bales. This was due to a sharp increase in mill use in 2009 coupled with back-to-back declines in production in 2009 and 2010.

Since the 2011 crop year, China has ramped up imports to rebuild stocks. Imports increased from a relatively normal 11.98 million bales in 2010-2011 to 24.53 million in 2011-2012 and 20.33 million in 2012-2013.

Importing these high amounts of cotton, China also perhaps anticipated a rebound in its economy and mill industry (use had fallen from 50 million bales in 2009-2010 to 46 million for 2010-2011). Mill use instead continued to decline and is projected to be only 36 million bales for 2013-2014.

These factors have resulted in China carrying 50.4 million bales into the 2013 crop year. China is projected to have even higher stocks—57.8 million bales or 60 percent of the world total—entering the 2014 crop year.

Stocks and price

World stocks were and continue to be at record levels, yet cotton prices were above 80 cents and even approached 90 cents on several occasions for the 2013 crop. As mentioned, China accounts for a large majority of world stocks. Stocks outside China, however, have tightened since 2011 (Figure 2).

It was the tightening of stocks in the rest of the world that helped sustain prices for much of 2013. Prices were also supported by China's policy of not using much of their stocks and continuing to import/buy even more cotton. Although world stocks are very high and because China holds most of that cotton, should China decide not to use those stocks, then effective stocks will be much less.

Price direction will depend on what China decides to do with that cotton and what other supply/demand factors are at the time. Eventually, these stocks must make their way into the pipeline.

By keeping these large stocks off the market and out of Chinese mills, the price of cotton becomes inflated above where it otherwise would be, which would not be good for the Chinese mills. Alternatively, using moderate amounts of this cotton would reduce demand and drive prices down, which would not be good for China's farmers. Under that scenario, China may provide subsidies to its farmers. Prices have weakened recently due to news that China plans to begin auctioning off and/or using some of its reserves/stocks.

China's imports are projected to be 11 million bales for the 2013 crop year—a more normal level compared to the previous two seasons. Looking ahead to the 2014 crop, China's stocks policy will continue to be a major factor impacting imports and, thus, U.S. exports.

Outlook

As of late 2013, 2014 cotton prices (Dec14 futures) are around 77 cents per pound. So far, Dec14 has ranged from 76 to 86 cents. Futures prices for the 2013 crop were also below 80 cents at one time.

U.S. cotton acreage declined 16 percent in 2013. Even prices in the mid-80s by planting time failed to keep acreage in cotton. Prices below 80 cents will not be attractive to growers—depending on what the alternatives are. Corn and soybeans are also likely to be less attractive in 2014 than for 2013.

As long as cotton is less than 80 cents, U.S. cotton acreage can be expected to decrease or, at best, remain stable in 2014. However, if harvested acreage is closer to normal and yield is good, the 2014 crop would still be larger than 2013. If U.S. and world production is down, this should provide some support for prices—albeit mitigated by large stocks.

If U.S. and world production increases, this would add further downward pressure on price unless demand shows marked improvement. If China decides to use stocks and reduce imports, this would also add downward pressure on price.

There appears to be potential risk to the downside, but prices are already (as of late 2013) in the 77-cent area. Better (higher) prices are possible but depend on U.S. acreage and production, foreign production, and China's stocks policy and impact on exports.

Prices (Dec14 futures) in the 75-cent area are possible. A range of 75 to 85 cents is most likely. As with the 2013 crop, producers need to take reasonable protection against the advent of prices in the lower area of that range. Prices beginning at an 80 cents basis for Dec14 seem reasonable.

Grains and Soybeans

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Acreage for Georgia corn, soybeans and wheat increased for the second year in a row in 2013. Growers shifted the acreage from peanuts and increased double-cropped cotton and soybeans. Corn again led the way with 510,000 planted acres followed by wheat at 420,000 acres, soybeans at 230,000 acres and grain sorghum at 50,000 acres.

Georgia growers generally keep a rotation of cotton and peanuts due to capital investment in machinery and infrastructure. However, rotations can change in the short term in response to market prices. An example is corn in 2013, where acreage exceeded peanut acreage for the first time since 1997.

Grain and soybean growers have enjoyed a good run of prices since 2007. However, the run appears to be over as U.S. and foreign producers have recovered from short production years. Corn, soybean and wheat prices are expected to fall in 2014.

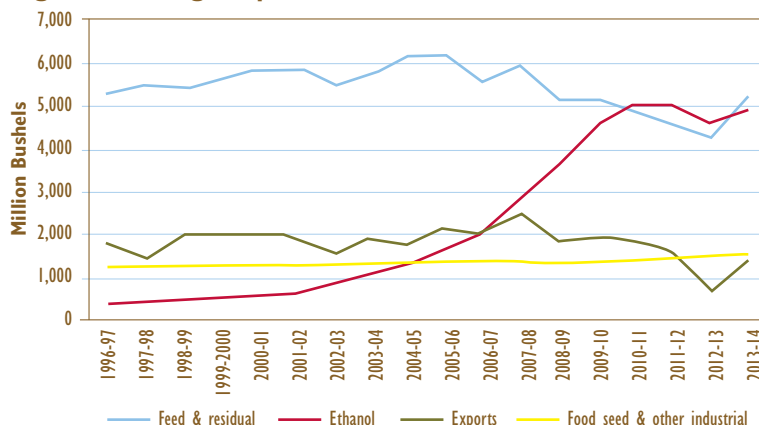
Corn

Georgia corn growers planted 510,000 acres in 2013, equaling a recent high acreage of 2007. It was only the second time since 1998 to reach 500,000 acres. Harvested acreage jumped to 460,000 acres, the highest since 1997. A new Georgia state record yield was set at 183 bushels per acre in 2013, beating 2012's record by three bushels.

Total production in Georgia is estimated by U.S. Department of Agriculture NASS at 84.2 million bushels of corn, the highest since 1979. More than 82 percent of corn acres grown for grain were reported as irrigated corn acres in Georgia last year. Georgia corn production represents about 30 percent of the total corn needed for livestock and poultry production in Georgia.

Nationally, U.S. corn growers reduced plantings in 2013 from 97.2 to 95.3 million acres. Harvested acreage hardly changed, falling from 87.4 million to 87.2 million

Figure 1. Change in pattern for corn use.



Source: Wade Report, U.S. Department of Agriculture – Nov. 8, 2013.

acres. The average yield rebounded from a drought-impacted yield of 123.4 bushels per acre to 160.4 bushels per acre. Thus, total production grew to a record 14 billion bushels in 2013.

All major categories of use are projected to increase to nearly 13 billion bushels by the end of the 2013-2014 marketing year (Figure 1). Ethanol use is projected to recover to 4.95 billion bushels. Feed and residual use is expected to grow by 20 percent, a reflection of profitability in livestock production. Corn exports have bounced back with strong growth of 91 percent to 1.45 billion bushels. Corn production in South America is expected to decrease with a drop in prices and increase in soybean acreage.

Prices will be below \$5 per bushel at the beginning of the year, and whether corn breaks the \$5 level in 2014 will depend on actual acres and continued growth in corn use. The U.S. range is projected at \$4.10 to \$4.90 for the 2013 crop. Georgia should average around \$6.50 due to a large percentage contracted between \$6.50 and \$7.00 per bushel. The 2014 average price will likely be below \$5 with the prospects of corn production staying around 14 billion bushels again in 2014.

Georgia growers' pricing decisions will be more difficult as margins will shrink. However, strong yields the last two years indicate better yield potential. Prices have supported planting corn the last two years, but are now in a neutral range between soybeans and corn. U.S. corn acres may not drop that much, and Georgia corn acreage will likely fall to 400,000 acres.

Wheat

Wheat planted acreage climbed in 2013 to 420,000 acres, up 45 percent from 290,000 in 2012. Georgia growers typically harvest two-thirds of the planted wheat acres. The grain crop planted in 2012 and harvested in 2013 was historically high at 83 percent. The average yield for Georgia was a new record of 60 bushels per acre, beating the old record from 2008 of 56 bushels per acre. Acreage for 2014 is expected to drop some with lower prices, but ought to be above 300,000 acres.

U.S. wheat acreage for the 2013-2014 marketing year is estimated to have increased by almost 1 percent to 56.2 million acres. While planted acres are up, harvested acres in the U.S. are down 7.6 percent to 45.2 million acres. Overall wheat supply is down 4 percent from last year. Ending stocks are

projected to decline to 575 million bushels or 21 percent.

While the supply situation has tightened, prices have weakened. Corn prices have helped support U.S. wheat prices, but that will no longer be the case with a large corn crop. Another factor weighing on price is that major export competitors Australia and Canada have raised production estimates, with Canada's being a record wheat crop.

The 2014 outlook for wheat is for a few more acres to be planted in the U.S. and use to grow in the food and export markets. Soft red winter wheat production will be up, but exports are projected to offset most of the increase in addition to domestic consumption. Exports have helped soft red winter wheat prices and the trend will need to continue. Georgia wheat will have to be competitively priced for export, likely mid \$5 range.

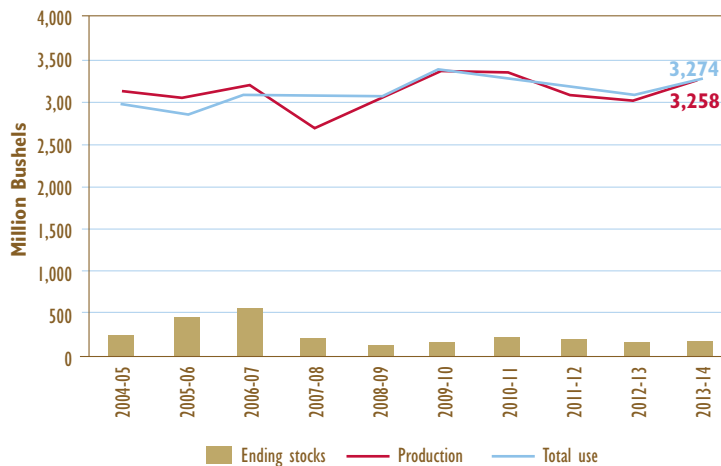
Soybeans

Georgia soybean growers were expected to increase production in 2013 due to favorable prices. Planted acreage did increase, but only by 10,000 acres to 230,000. Coming off a record yield of 37.5 bushels in 2012, growers had a difficult time planting due to it being too wet, particularly in the eastern region of the state. The 2013 crop turned out to be another record state yield at 38 bushels per acre. Last year's acreage was in the middle of the 10 year range of planted acreage.

The U.S. soybean crop rose 7.4 percent despite a 1 percent drop in planted acreage to 76.5 million acres. Harvested acreage dropped 0.5 percent, and yield improved by three bushels to a 43-bushel average. Total production is estimated to be 3.26 billion bushels (Figure 2).

Total use is projected to be 3.274 billion bushels, up 5.7 percent. Exports are mainly responsible for the increase with strong

Figure 2. U.S. soybean supply and demand.



Source: Wade Report, U.S. Department of Agriculture – Dec. 10, 2013.

sales to China. South America is poised to produce a record crop in 2014 with Brazil likely to pass the U.S. in production. World stocks of soybeans will increase 10 million metric tons to 70 million metric tons. Domestically soybeans are fairly tight, but globally stocks are growing. China is the main driver of the U.S. market, as demand growth will come in the form of exports.

Expectations are for soybeans prices to average \$12.50 per bushel from the 2013 crop and to fall next year as supply increases. Futures indicate around \$11.50 per bushel, but could fall as the South American production enters the market in 2014. Overall, soybeans have the most bullish outlook of the row crops in 2014.

Peanuts

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Growers shifted away from peanuts in 2013 in response to lower peanut prices and better prices for cotton, corn and soybeans. U.S. planted acreage dropped 35 percent to a 99-year low of 1.06 million acres. Georgia dropped from 735,000 to 430,000 acres for a 41 percent decline, the lowest since 1917.

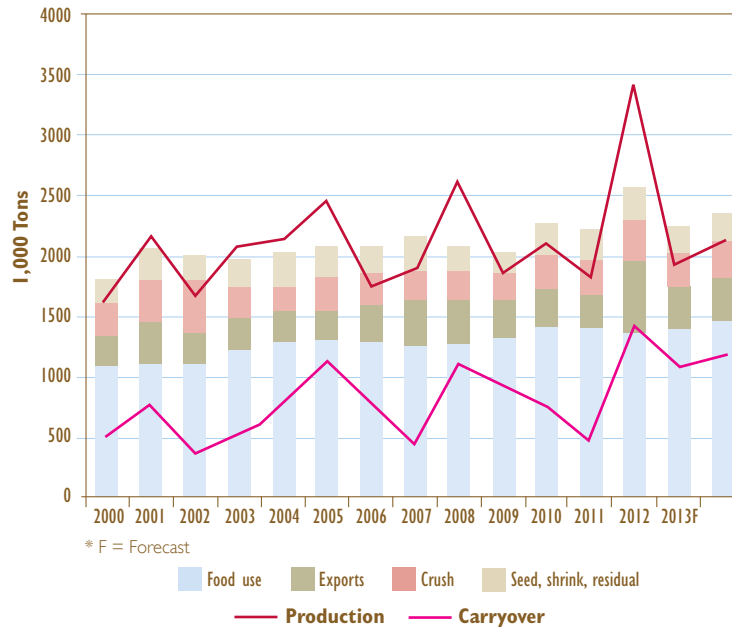
The Southeast planted 739,000 acres in 2013 with Alabama (140,000 acres), Florida (135,000 acres) and Mississippi (34,000 acres) each dropping plantings by 36 percent. The Southwest peanut region (New Mexico, Oklahoma, Texas and Arkansas) reduced acres by 23 percent for a total of 141,000 acres. The Virginia-Carolina region (North Carolina, South Carolina, Virginia) reduced acreage by 25 percent to a total of 178,000 acres.

Acreage reductions were offset by better-than-projected yields. Georgia had another two-ton-plus yield at 4,150 pounds per acre. New varieties dominated by Georgia-06G are out-performing yield model projections. Georgia-06G was grown on more than 80 percent of the peanut acreage in Georgia, Alabama and Florida this past year. The U.S. average yield did not break two tons, but was still the second best on record at 3,787 pounds per acre. As a result, total production is estimated at nearly 2 million tons on 1.03 million harvested acres.

Thus, peanut growers produced a larger crop than expected, even with the lowest acreage going back to 1914. A large supply and return to normal pace of use has the 2014 outlook subdued as far as price prospects.

Peanut use experienced ups and downs the past year. Demand for peanut butter was hurt when retail prices were raised in 2012, and the effects are still being felt in the peanut butter market. Manufacturers were slow making purchases in 2013, as the shelled edible price fell below 50 cents per pound.

Figure 1. Peanut disappearance by use, 2001-2013F.*



Source: Oil Crops Outlook, Economic Research Service, U.S. Department of Agriculture.

Table 1. Peanut supply and demand estimates with 2014 projections.

	USDA			2014 Projections		1,000 Tons
	2011-12	2012-13	2013-14	3,735 Lb. Yield, 1.14 Mil. Acres	3,735 Lb. Yield, 1.19 Mil. Acres	
Beginning Stocks	758	502	1,386	1,386	1,386	
Production	1,830	3,382	1,950	2,130	2,221	
Total Supply	2,714	3,943	3,368	3,548	3,639	
Total Use	2,213	2,557	2,246	2,359	2,359	
Ending Stocks	502	1,386	1,123	1,189	1,280	

The low price and lack of activity in the market opened the door for a new buyer—China. India had a shortage of peanuts and suspended exports to China's purchases were timely in helping reduce some of the surplus stocks, supporting the price of edibles in the U.S. and bringing manufacturers to the table to purchase 2012-crop peanuts. China purchased more than 70,000 tons, which was slightly more than the U.S.'s number one export market, Canada. As quickly as China appeared in January 2013, they exited the market by planting time. India produced a large crop, and exports to China resumed.

The jump in exports boosted total U.S. use of peanuts to a record level of 2.557 million tons for the 2012-2013 marketing year. All major categories increased except domestic use. Domestic use ended the marketing year down by 2.5 percent at 1.367 million tons. Exports more than doubled to 600,000 tons. Crush increased by 9 percent to 328,000 tons. Seed and residual use increased by 12 percent to 264,000 tons (Figure 1).

2014 forecast

Growth of domestic peanut use is expected in the 2013-2014 marketing year to be led by candy and snack consumption. Peanut butter consumption should rebound, too, with lower shelled prices and positive health news of peanuts.

The carryover going into the 2013-2014 marketing year beginning Aug. 1 was just under 1.4 million tons. This would fill the domestic market consumption by itself. The 2 million ton crop of 2013 will drop the stocks level by at least 250,000 tons.

Domestic food use is projected to rise by 3 percent to 1.408 million tons. Exports will fall back without China's presence to 350,000 tons. Crush and seed/residual use are expected to shrink with a smaller 2013 crop. The net effect will be a drop of 12 percent from record consumption of last year to 2.25 million tons.

If realized, this would leave a carryover of 1.12 million tons representing 80 percent of domestic use and 50 percent of total use. Ironically, this is very close percentage wise to the situation heading into 2013. A large buffer of stocks still fills the pipeline, and consumption needs to be increased to continue to work the surplus down.

Given the use projections, the outlook for 2014 is not much different than this time last year. Expansion of acreage will need to be limited to avoid another large carryover. The biggest difference from last year is lower projected prices offered for other spring crops that compete for acres and are in rotation with peanuts (corn, cotton and soybeans).

To begin projecting 2014, some assumptions for yield and harvested acres need to be made. Two scenarios are considered in Table 1: 1.14 million and 1.19 million harvested acres, representing a 10 percent and 15 percent increase in planted acres, respectively. The average yield projection is based on a trend yield of 3,735 pounds per acre. Each scenario assumes a growth in total consumption of 5 percent. If acres increase more than 10 percent, then consumption will need to grow by more than 5 percent to keep from adding to the surplus.

Thus, the price outlook is for prices for farmers to remain about the same in 2014 as 2013, as long as acres do not increase more than 10 percent. Breaking \$500 per ton will be difficult unless farmers decide to sit out a year because \$425 to \$450 does not cover costs. Virginia types are also likely to be contracted in the same range as last year, but being a smaller market than runners and with the increase in exports and snack/candy uses, the price outlook may be a little more positive than for runners.

Overall, 2014 will be a year in which planting decisions will be more difficult with an overall decline in prices for row crops. Contracts will likely begin for runners at \$425 to \$450 on limited tons.

Fruits and Nuts

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The fruits and nuts producer price index (PPI) in the first quarter of 2013 hit a record high, but this did not last long as it quickly eroded below that of 2011 and 2012 levels. On the other hand, the consumer price index (CPI) experienced slightly less than a percentage increase this year compared to June last year.

This infinitesimal increase could be credited to the superior prices from navel oranges, peaches and cherries; just enough to offset the inferior prices obtained from grapefruit, lemon, strawberries and Thompson seedless grapes.

Blueberries

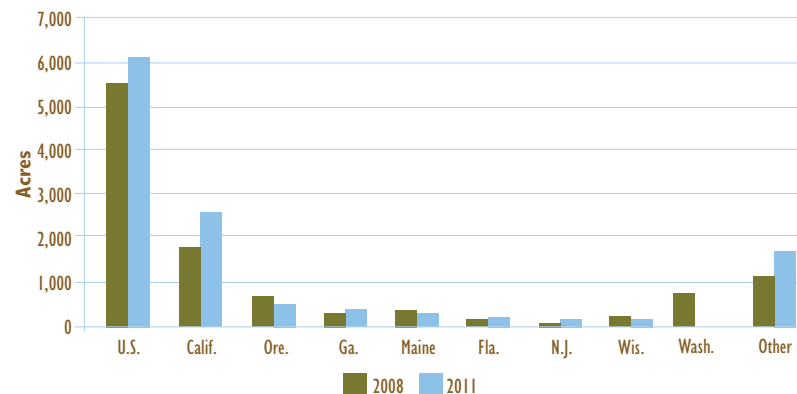
The Georgia blueberry industry is expanding every year, although shipment trended down by 4 percent this year. Other Eastern states also experienced slow shipment, but this quickly improved in July 2013. The downward trend in most producing states was credited to the increased f.o.b. prices that south Georgia, Florida and California enjoyed this year compared to last year.

Georgia growers on average received \$30 to \$35 per 12 (1-pint) cups with large lids in May this year compared to \$26-31 last year. By June, the prices had fallen to \$19-21 compared to \$16-21 the previous year. Targeting the market window can make a difference in net returns, but it is difficult to predict nature.

Peaches

The U.S. peach shipment volumes fell by 16 percent this year compared to last year. Some states experienced up to 30 percent decrease in volume, even though Georgia suffered only 5 percent. The quality of Georgia peaches was excellent despite growers complaining that the persistent heavy rains had an impact on the taste of the fruits. California also suffered a 10 percent decrease in shipment volume.

Selected trend in harvested acreages of organic berries in the U.S., 2008 and 2011.



Source: Economic Research Service, U.S. Department of Agriculture.

Due to these shortages from the major producing states, Georgia and South Carolina enjoyed favorable f.o.b. prices of \$17 to \$19 per half-bushel carton of yellow flesh varieties this year compared to \$16-18 in 2012. South Carolina is still ranked second in the nation in peach production, while Georgia is comfortably third.

Watermelons

Watermelon production and shipment increased in almost all producing states. Improved shipment in early July 2013 was seen from Georgia, Florida, Texas and Alabama in the South, while the same trend was seen in California, Arizona and overseas. With excessive supplies, the basic economic theory of demand and supply sets in, thus depressing prices compared to 2012. For example, red-flesh seedless watermelons were sold for \$4.14 each this year compared to \$4.44 during the same time period last year. Prices for cantaloupe were \$2.21 on average this year, whereas they were \$2.57 last year.

Organic fruits

Since the inclusion of Title X: "Horticulture and Organic Agriculture" in the 2008 Farm

Bill, there has been growing interest in organic fruits production, including berries (see figure above). Nationally, the farm gate values for organic fruits (not including berries) was up 20 percent, whereas the value for berries alone increased by more than 3 percent between 2008 and 2011. California and Washington have positioned themselves as top producers of organic tree fruit due to the comparative advantage they have regarding overall weather conditions compared to other states.

Besides berries, the top most important organic fruit crops in terms of generated farm gate values that are providing opportunities to growers are grapes, apples, oranges, pears and sweet cherries. For the past four years, marketable non-citrus organic fruit increased by 18 percent with a take-home value of \$436.2 million. On the other hand, organic citrus rose by 34 percent and generated \$58 million during the same time period. As of 2011, total harvested area for organic fruit and berries stands at 81,537 acres, which is 3 percent less than in 2008.

Export/import trade

Pecan production and export continues to be lucrative. This trend is expected to

remain strong for the next few years, or as long as the acreage expansion has not reached bearing age and closes the demand and supply gap. The gap between demand and supply continues to increase as more foreign countries are interested in pecans.

In the 2012-2013 season, pecan exports were 70.9 million pounds compared to 50.9 million pounds shipped overseas in the 2011-2012 production season, thus an increase of 31 percent. Trade negotiations between India and the U.S. to reduce import tariffs would definitely increase Georgia's and/or the U.S. pecan export volume and

market share if successful. The other tree nut crop that enjoyed 5 percent favorable export was pistachio.

Free trade agreements

The new free trade agreement being negotiated by the U.S. will bring the needed opportunities for horticultural products, especially the fruits and vegetable industry. The Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership are all aimed at liberalizing trade between the signatory countries. These trade agreements are supposed to

reduce tariffs and improve the sanitary and phytosanitary (SPS) requirements as well as technical standards that are all hindering increased market share of U.S. fruit and vegetables in those markets.

Horticultural exports were estimated at \$32 billion in 2013, out of which \$15 billion was for both processed and fresh fruits and vegetables. Strong demand for whole and processed tree nuts such as pecans, almonds, pistachios and walnuts generated \$7 billion. This trend is expected to escalate when the Trans-Pacific Partnership Agreement is finalized.

Vegetables

Dr. Esendugue Greg Fonsah (gfonsah@uga.edu), Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

The latest U.S. Department of Agriculture ERS report depicted that there will be an average annual increase of 0.7 percent for vegetables grower's prices this year. The report also forecasted 2.9 percent export and 4.6 percent import growth from 2013 to 2022. Consumer price index (CPI) also rose by 6.3 percent, whereas the supply for major vegetables fell 14 percent during the same time period.

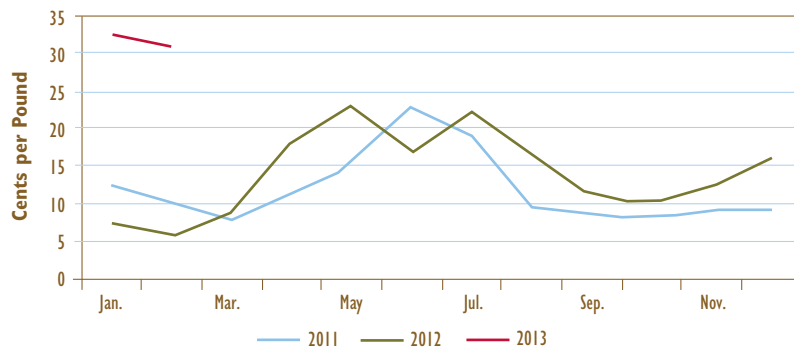
There was a delay in vegetable planting in Georgia due to too much rain in the first quarter of 2013. Georgia and Texas reduced their plantings and harvested areas for spring bulb onions, probably due to the excessive rain, whereas California's went up. Overall, bulb onions experienced a 16.6 percent decline in both yield and acreage last year, thus triggering the high prices producers received and consumers paid for their bulb onions in the first quarter of 2013 (Figure 1).

The tomato industry is also encountering drastic changes. The new trend shows that field tomato (Round, Roma and Greenhouse) experienced 12, 16 and 11 percent decreases in production this year compared to 2012 (Figure 2). On the other hand, the protected-culture tomato production, which was up 40 percent compared to 2004, is becoming popular amongst foodservice and fast-food buyers.

California is the leading bell pepper-producing state with 51 percent of total U.S. production. The runner up is Florida with 26 percent. Georgia is third with 6 percent. Other major producing states include North Carolina, Ohio and Michigan. Like tomatoes, peppers are also going through changes in terms of production systems, as the use of protected-culture technologies are rapidly increasing.

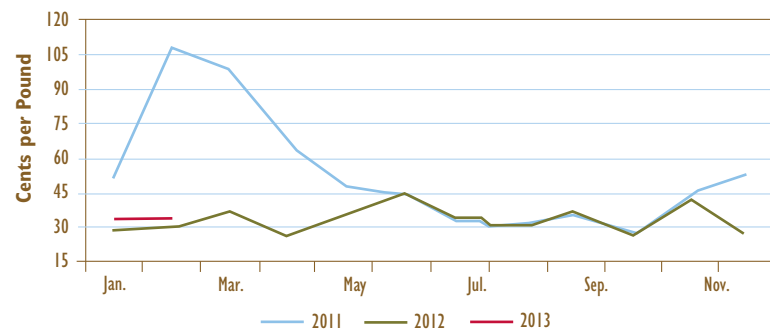
A U.S. Department of Agriculture NASS report revealed that greenhouse yields of bell peppers were twice as much as field-grown (i.e., 64,500 pounds compared

Figure 1. Prices of fresh onions in the U.S., 2011-2013.



Source: Vegetable and Pulses Outlook (VGS-353), Economic Research Service, U.S. Department of Agriculture – March 29, 2013.

Figure 2. Price of fresh tomatoes in the U.S., 2011-2013.



Source: Vegetable and Pulses Outlook (VGS-353), Economic Research Service, U.S. Department of Agriculture – March 29, 2013.

to 31,340 pounds per acre). Studies by UGA vegetable scientists are consistent with the NASS report but showed that intermediate shed produced the best yields and marketable quality. Out of the 1.8 million pounds of protected-culture green peppers produced this year, 3.5 percent were from hydroponics. Mexico and Canada are taking the lead in the adoption of shade and greenhouse vegetable production

The enactment of the Food Safety Modernization Act (FSMA) into law by President Obama in 2011 combined with the ongoing Trans-Pacific Partnership (TPP) and Transatlantic Trade and Investment Partnership (TTIP) negotiations are major changes and welcomed news for the U.S. horticultural industry, as this will open up

new opportunities for our growers.

In anticipation of finalizing these negotiations aimed at boosting the industry, the U.S. Food and Drug Administration developed and published the “Standards for Growing, Harvesting, Packing and Holding of Produce for Human Consumption” regulations (also known as the “produce rule”) in January 2013.

Although China is the largest cultivator and supplier of vegetables worldwide, they have changed their aggressive export market penetration and expanding market share policy to cater to the ever-increasing local consumers. This change in the Chinese policy is an added advantage for the U.S. horticulture industry at large and Georgia in particular.

Horticulture and Turf

Dr. Forrest Stegelin (stegelin@uga.edu), Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

The signs of economic recovery are small, but they are real. The housing market and jobless rate are starting to show improvement. There are still many challenges, but for an industry that relies on disposable personal incomes for purchases and that has been finding its way through a long-term recession, the worst is hopefully behind us. Growers are using these signs of optimism for justification to increase production.

Grower intentions

Herbs and vegetables, potted flowering plants, container perennials and ornamental bedding plants are the categories in which the most increases in production are projected for 2014. Of Georgia's medium sized growers, nearly 60 percent are planning to grow more potted flowering plants—perhaps a reflection of consumers' desires for convenience and immediate gratification. More than two-thirds of the large growers are also planning to grow more flowering potted plants, while nearly 45 percent of the large growers plan to produce more plugs and propagation material—for selling to the small- and mid-sized commercial growers.

Vegetables, not flowers, are the future for many small- to mid-sized greenhouse and container nurseries; many growers are looking to organic or natural for the “buy local” market, as well as using hydroponics and aquaponics as production strategies to utilize empty greenhouse capacity.

The industry-wide consolidation observed since the start of the 21st century is finally settling down. Fewer operations are producing ornamental crops, while positive economic signs suggest those still in business will be able to regain their pre-recession footing, although they are marketing the flowers too cheaply.

For other operators, a generation of young adults that is educated and demanding

healthier options in their diets is driving the fruit and vegetable production movement. Analogous to cheap flowers on the market is the production of cheap calories and a prevalence of obesity. This new generation of customers is asking for locally grown, fresh food, and they are willing to pay more for it.

For small producers, herbs and vegetables are the highest area of projected increased production (more than 40 percent of those questioned), with about one-third also planning to increase production of container perennials, more than 30 percent increasing ornamental bedding plant production and nearly 30 percent intending to increase flowering potted plant production. Large and medium-sized growers likewise cite intentions to increase production in the same product categories.

The only segment of ornamental or environmental horticulture to see drastic reductions in production is the woody ornamental category—no surprise, given the higher price points and the dependence on the residential housing and commercial property markets. The consensus opinion on pricing was to hold steady to the posted 2013 prices to the end-users.

For sod and turfgrass producers, varieties with unique attributes are the most sought after—drought tolerance, shade tolerance, salt-water tolerance, compact/dwarf or slower growing (for less mowing), high density/traffic (for sports fields and pedestrian paths), colorfast, and/or pest resistance. Consolidation by merger or buy-out has occurred among firms in environmental horticulture, as well as sod/turfgrass production and marketing, allowing for both diversification and specialization on greenhouse, container and field nurseries, and on sod farms to meet regional demands at a low cost.

Producer concerns

Even with the increased, albeit small, optimism expressed by the green industry, the list of challenges is still lengthy, and features the usual culprits. The economy is the biggest concern again for 2014. Developing business plans and budgets for 2014 and beyond is difficult, if not impossible, in this economic environment.

Most growers mentioned frustration with the government and offered sidebar comments on how out-of-touch Congress appears to be with their constituents, either as private citizens or entrepreneurs driving the economy on a growth path. Other hot topics include immigration reform, the Farm Bill and the Affordable Care Act (dubbed Obamacare) as issues affecting the environmental horticulture and turfgrass industries.

It is noteworthy that concern about the product or marketing mix was not an issue; reason being that the production technologies utilized and the sourcing of inputs and transplants or seeds are universal, with little price variation. Concerns focus on providing solutions to consumer problems and satisfying consumer needs with a quality, yet fairly priced product, relying on any competitive advantages each firm may have. Demand, and not supply, is the watchword for 2014.

Dairy

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Georgia dairy farms generated approximately \$340 million in farm gate value in 2013 and are on track to see that number again during 2014. The state will begin 2014 with approximately 240 dairies, which are collectively expected to produce about 1.55 billion pounds of milk during the year.

The number of dairies in the state has declined substantially over the past decade, from 394 at the beginning of 2001 to 240 by the end of 2013. Losses have been primarily among smaller dairies milking 200 or fewer cows, while the number of dairies milking 750 or more cows has increased, as the remaining farms grow larger.

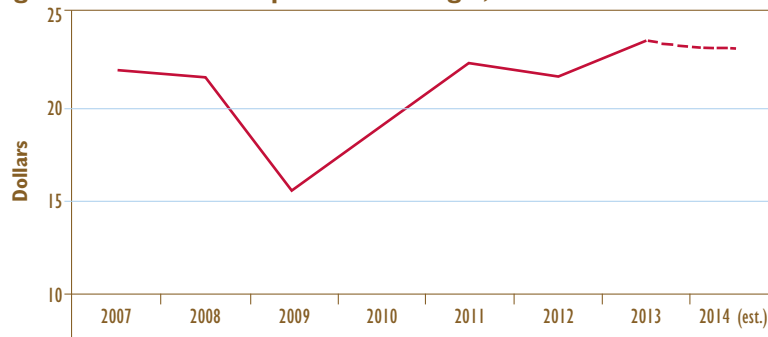
Following a slow but steady decline of about 4 million pounds (1 percent of production) per year between 2000 and 2010, production rebounded to 1.44 billion pounds in 2011 and has averaged about 1.5 billion pounds since then.

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 increased to around 80,000 over the past few years as existing farms have expanded and several new ones have been established.

Milk production has also received a boost through efficiency gains, with milk per cow increasing by nearly 10 percent since 2010 (from 17,500 pounds per cow per year to around 19,000).

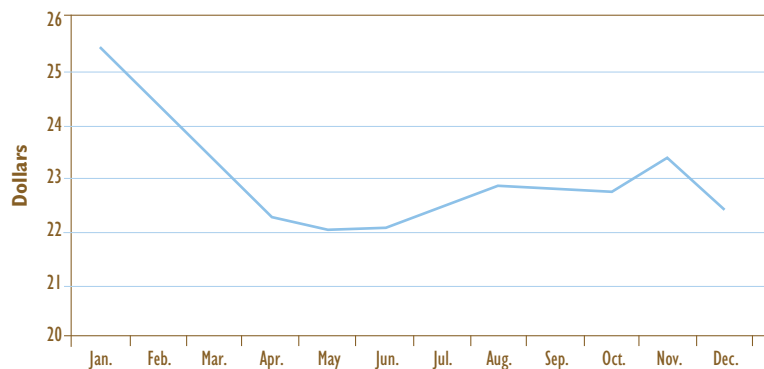
Milk production is highly concentrated in the central and southwest parts of the state where the top five milk-producing counties are home to 47 percent of the state's dairy herd and produce an equivalent percentage of its total milk production. More than half of the milk produced in Georgia is exported to fluid milk bottling plants outside the state, primarily in Florida, while the remainder is processed in one of Georgia's three major bottling plants.

Figure 1. Mailbox milk prices in Georgia, 2007-2014.



Source: Generated by Dr. Tommie Shepherd based on U.S. Department of Agriculture data.

Figure 2. Projected monthly mailbox milk prices for Georgia, 2014.



Source: Generated by Dr. Tommie Shepherd based on U.S. Department of Agriculture data.

Milk prices are characterized by volatility in the form of multiyear price cycles (Figure 1). Following two years of record high milk prices in excess of \$22/cwt during 2007 and 2008, Georgia dairy farmers saw milk prices plummet below \$16/cwt during 2009. Prices subsequently recovered to around \$20/cwt in 2010 and reached a new record high of \$23/cwt in 2011 before moderating to around \$20 in 2012. Prices cycled upward again in 2013, reaching levels near \$23.50, as a result of slowing milk production growth coupled with record-high dairy product exports and strong domestic demand during the second half of the year.

Farm milk prices for 2014 are expected to decline, although not as sharply as in past cycles, as favorable profit margins and increasing cow numbers lead to national production increases in the neighborhood of 1.5-2 percent.

Global markets

Although Georgia's dairy industry is primarily local, local milk prices are increasingly influenced by regional, national and even international supply and demand conditions for dairy products.

Federal Milk Marketing Order milk prices are minimum prices that must be paid by milk processors to dairy farmers. Most dairy

cooperatives typically pay their members premiums in excess of FMMO minimum prices based on factors such as quality, quantity and location.

Federal Milk Marketing Order policies tie local milk prices to national dairy commodity market conditions. National conditions may, in turn, be influenced by global dairy markets. World demand for U.S. dairy exports such as butter, cheese and milk powder reached record levels in 2013 and should remain strong during 2014, providing significant support for domestic farm milk prices.

U.S. market

U.S. milk production strengthened during 2013 as feed prices moderated from the drought-induced, record-high levels of 2012. The trend towards more favorable feed prices should continue (assuming there is no drought in 2014), resulting in lower feed costs and improved profit margins for dairy farmers.

Strong farm-level milk prices in 2013 laid the foundation for milk production growth in 2014. The national dairy herd is expected to grow by around 20,000 head and milk per cow productivity is projected to rise by 1.5 percent.

The typical negative impact of production increases on farm price levels will be partially offset by continued strong domestic and international demand for U.S. manufactured dairy products. While somewhat weaker demand for U.S. dairy exports is a possibility in 2014, due to increased competitiveness from Australia and New Zealand, actual reductions are likely to be small.

Current dairy market conditions suggest that national production will grow by 1.5-2 percent and that farm milk prices will decline by a modest 1-2 percent in 2014.

Georgia prices and production

Georgia is located in the Southeast Federal Milk Marketing Order. As a part of the

FMMO system, milk prices in Georgia are tied to national prices for manufactured dairy products and adjusted upward to account for the fact that the state is milk deficit (i.e., consumes more milk than it produces).

Therefore, 2014 milk prices in Georgia will follow the national trend of decreasing by an estimated 1.5-2 percent from 2013 price levels. Georgia dairy farmers received an average of about \$23.50/cwt. in 2013 and can expect about \$22 to \$23 per hundred pounds in 2014 (Figure 2).

The trend of increasing milk production witnessed over the past two years in Georgia 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 of the past couple of years improves. Energy and other non-feed input costs will continue to rise, impacting all dairy farmers, especially those who grow a significant portion of their own feed.

Beef Cattle

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2013 was generally a very good year for many Georgia cattlemen. Abundant rains and falling corn prices kept feed costs low and pushed prices higher in the mid-late summer and into the fall. This strong counter-seasonal move was so powerful that feeder cattle actually posted their highest prices for the year in November (Figure 1).

Beef production and supply

Domestic beef production is projected to be down almost 6 percent to slightly less than 24.2 billion pounds. This decline in production is driven by fewer cows producing fewer calves to go to the feed yards. Also, assuming there is favorable weather across much of the country, beef cow slaughter will be lower due to producers preparing for herd expansion.

The lower U.S. beef production will lead to lower total beef supplies in 2014, as carryover stocks of beef are projected to be lower headed into January 1. Simultaneously, beef imports are projected to remain essentially the same in 2014 as they were in 2013. The overall net effect will be lower supplies of beef in 2014 (as well as 2015 and perhaps even 2016).

Demand

Beef demand continues to hold up fairly well considering the current state of the U.S. economy. Since consumers can't eat any more beef than is being produced and beef production has been declining in recent years, beef consumption will also decline.

Demand takes into account not only consumption, but also price. It is affected by consumer's income, the prices of competing and complementary goods, and consumer's tastes and preferences. When these factors are considered, beef demand has noticeably improved since 2009.

The stable to slightly improving demand is driven not only by domestic demand but also by international demand. Data from

Figure 1. Medium and large No. 1 and 2 steer calf prices in Georgia, 500-600 pounds weekly.

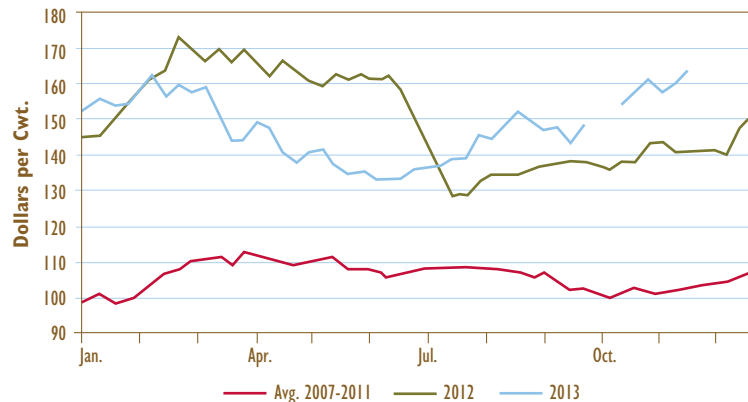


Table 1. Prices for various classes of cattle in Georgia, 2013-2014

Animal Class	2012	2013	2014
500 Lb. Steer* (\$/cwt.)	\$149	\$148	\$150-160
750 Lb. Steer* (\$/cwt.)	\$129	\$125	\$125-140
Choice Fed Steer	\$128	\$128	\$128-138
Slaughter Cow* (\$/cwt.)	\$80	\$80	\$80-90

* All prices other than Choice Fed Steers are basis Georgia.

Source: The University of Georgia.

the U.S. Meat Export Federation (USMEF) indicates that even though beef export volume (tons) was down in 2013, the value of beef exports was up, indicating strong demand for U.S. beef abroad. In fact, exports as a percentage of beef production were almost 9 percent in 2013, which is right in line with our historical performance.

Price

Although beef demand has improved, the primary obstacles of pushing prices higher are: 1) stagnant, disposable consumer income and 2) increasing production levels of competing meats.

So even though cattle supplies are extremely tight, it will still be harder to push beef prices much higher when consumers don't have any more real (adjusted for inflation) income than they did in 2006.

Also, broiler production is expected to be up about 2.5 percent and pork production should be up about 3 percent in 2014. The combination of these factors will keep a lid on beef and the resulting cattle prices, even though cow numbers are low and feeder cattle supplies are remarkably snug.

However, prices for 2014 are projected to be higher than in 2013 (Table 1). For the year, prices for 500-600 pound steers are expected to run \$5 to \$10 per hundredweight higher than in 2013. Virtually all of this increase can be attributed to higher live cattle prices and lower corn prices. As a result, feed yards can justify paying more for calves. It should be noted that any changes driving corn prices higher or reducing consumer demand will result in lower prices.

Pork

Dr. R. Curt Lacy (clacy@uga.edu), Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

Pork producers saw 2013 begin the year with modest carcass prices and high feed prices. However, by the third quarter, sales prices were at historic levels and feed costs had begun moderating. The net effect of these two different situations resulted in pork producers coming very close to breaking even.

Through November 2013, net prices on a carcass-weight basis were running almost 5 percent above 2012 levels and 25 percent above the five-year average (Figure 1). With carcass weights remaining steady at 203 pounds (dressed-weight basis), the net effect was an increase of more than \$8 per head in revenue compared to 2012. Looking forward, more production, steady exports and favorable feed prices will shape the pork outlook for 2014.

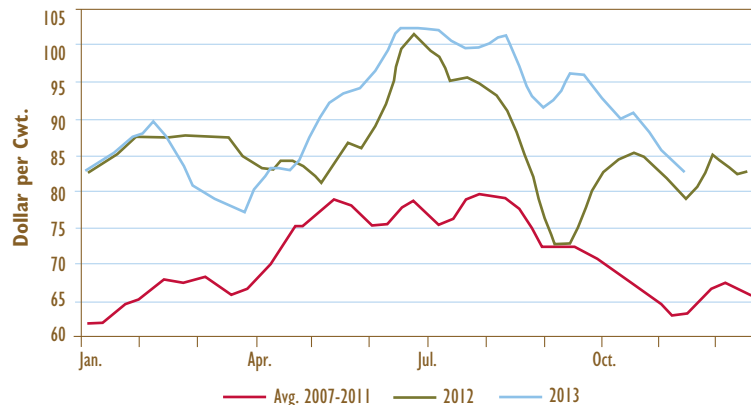
Production and supplies

Pork production was essentially unchanged in 2013. For 2014, both the U.S. Department of Agriculture and Livestock Marketing Information Center project total pork production to be between 23.7 billion and 24 billion pounds, an increase of 2.6-3 percent.

The September 2013 Hogs and Pigs Report contained a couple of surprises, with the major one being the number of sows and pigs still on hand as of September 1. Many analysts had expected the substantial negative profits and losses from porcine epidemic diarrhea virus (PEDV) to lead to fewer sows farrowing in the second half of 2013. While it poses no food safety or human health concerns, mortality in an infected swine herd can run from 30 to 100 percent. As of late November there were 378 confirmed cases of PEDV in 19 states, with most of those being in Iowa and Oklahoma. This number is expected to stabilize.

The September 2013 Hogs and Pigs Report also pegged the nation's breeding herd at 5.84 million head, the same as 2012's number. The report indicated that hog

Figure 1. Net slaughter hog prices for U.S. barrows and gilts, 2013 and recent years.



Source: Livestock Marketing Information Center using data from Agricultural Marketing Service, U.S. Department of Agriculture.

Table 1. Production and price projections for 2014.

	Production (Bil. Lbs.)		Prices (\$/cwt. Carcass Basis)	
	2013	2014	2013	2014
Q1	5.78	5.87	\$81.08	\$88-92
Q2	5.52	5.64	\$89.32	\$90-95
Q3	5.62 ^a	5.80	\$95.25	\$87-93
Q4	6.29 ^b	6.46	\$86-89 ^a	\$79-85
Year	23.25	23.76	\$88-89 ^b	\$87-92

^a and ^b are preliminary estimates for 2013.

Sources: LMIC, USDA and University of Georgia.

producers intended to farrow essentially the same number of sows in June–November as last year. The net result of these static farrowing intentions should mean slightly higher pork production in 2014, since carcass weights are projected to remain the same, but pigs per litter are expected to continue increase slightly.

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.

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. By 2013, pork exports represented 22 percent of domestic production, with net pork exports accounting for 18 percent of U.S. pork production, up 9 percent and 10 percent from 2004, respectively.

Outlook for prices

Prices are expected to remain about the same or slightly better during the first half of 2014 compared to 2013. However, as production increases on more pigs and heavier weights in the second half of the year, prices should decline slightly when compared to 2013 (Table 1). Profits are expected to improve with lower feed prices.

Poultry

Dr. John C. McKissick, Professor Emeritus, Department of Agricultural and Applied Economics, UGA College of Agricultural and Environmental Sciences

Christmas came early in 2013 for the majority of the poultry industry. A record corn crop combined with the first corn use decline for ethanol since its introduction sent fall harvest corn prices reeling by more than 40 percent. Corn is the primary ingredient in feed rations resulting in significant feed cost savings. As a result, 2012's thin to negative profit margins were well in the black by mid-year. Broiler producers cutting or stabilizing production as a result of the 2012 cost-price squeeze were also benefited by record broiler price gains during 2013's first half, just as the feed crops size were most uncertain.

Now that the record crop is in the bin and with little chance ethanol mandates will add further to current corn-to-fuel production demand, poultry producers will once again return to significant production growth and increasing poultry product on the market. The only profit questions left for most industry producers is how much growth can the market bear before price declines overcome the profits gained. Uncertain federal and state poultry industry regulations as well as confusion over the cost implications of health care may provide some damper to expansion plans.

Broiler profit outlook

Broiler producers experiencing negative cost/price margins began shaving production in late 2011 and into early 2012. As a result, production was stagnant during the first quarter of 2013. Restrained production combined with good export and white meat demand provided the groundwork for price strength. Broiler prices responded by gaining more than 22 percent from 2012's first half average price. The \$1.06 per pound composite broiler price was a new record. Producers responded by ramping up production and by pushing prices close to 2012's levels by year's end. Still, 2013's average yearly price will be in the

upper 90 cents per pound range, shattering 2012's average by gaining 14 percent or about 12 cents per pound. With falling feed prices and stronger market prices, broiler producers will certainly grow supplies, resulting in lower 2014 broiler prices.

Broiler production showed little growth until the last half of 2013 and then by about 3 percent the last half year. Overall, 2013's broiler meat production will average about 2 percent above 2012's production.

Boiler egg hatchery flocks and the late 2013 production surge suggest 2014's production will return to the 3 to 4 percent year-over-year growth the industry experienced in earlier years. Such a growth rate assumes corn plantings in 2014 and/or weather conditions allow for sufficient feed grains production to maintain the "safe" corn carryover levels achieved in 2013. A 3 percent plus growth in broiler supplies would be the first since 2010.

Broiler prices have become much more responsive to production growth or contraction in the last 15 years as world competition grew and demand growth slowed. Thus the industry has had to rely on an unnatural tendency to slow expansion. For instance, in the '90s, a 1 percent change in production resulted in only about a .5 percent change in real (adjusted for inflation) broiler price in the opposite direction.

Production changes in the past 12 years seem to have more impact on price. For instance, a 1 percent production change has resulted in an opposite 1.5 percent change in real broiler prices, placing greater emphasis on managing growth in order to grow revenue.

Competing meat supplies will be reduced in 2014 as in 2013. Red meat production, particularly beef, will be considerably smaller and should provide continued support for broiler prices. Small competing meat supplies and resulting high prices

likely supported the strong white meat demand experienced in 2013. White meat prices soared, providing the main source for the record high broiler prices of 2013. For example, whole chicken breast prices averaged about 25 cents per pound higher in 2013 than in 2012, while leg quarter prices only equaled 2012's prices. The continuation of record high beef product prices and the expected increase in pork prices will surely provide continued support for broiler demand.

U.S. broiler exports remained strong in 2013 at 7.4 million pounds or about 1.7 percent higher than in 2012. Mexico's slow flock recovery from avian influenza outbreaks were chiefly responsible. Russian import growth was another positive. 2014 will likely be another record export year but with only moderate growth over 2013's exports. While exports are forecast to increase by 2 percent or so in 2014 from 2013, exports will still account for a hefty 19-plus percent of U.S. production.

As always, trade disputes and economic retaliation by countries for other U.S. policy threatens meat exports and makes export forecast extremely difficult. A new and possibly unaccounted factor in 2014 will be China's response to the WTO ruling against antidumping and countervailing duties on U.S. chicken parts. The relatively low long-term value of the dollar against other world currencies should continue to provide export support.

Per capita domestic broiler meat supplies (production net of exports) will increase in 2014 by a little less than production as increased broiler exports and population growth exceeds the forecast growth rate in production. The forecast 2.5 percent year-over-year increase will likely represent only the fourth year-to-year increase of the last eight years. The forecast levels of production combined with foreign demand should result in implied whole bird values

Outlook summary

	2010		2011		2012		2013		2014F*	
Broilers										
Production (Mil. Lbs.)	36910	3.9%	37201	0.8%	37,039	-0.4%	37,791	2.0%	38,900	2.9%
Exports (Mil. Lbs.)	6765	-0.8%	6971	3.0%	7,274	4.3%	7,395	1.7%	7,550	2.1%
Per Capita Supplies (Lbs.)	82	3.3%	83	0.6%	80.4	-3.0%	82	1.6%	84	2.4%
12 City Price (Cents/lbs.)	83	6.8%	79	-4.7%	86.6	9.6%	99	14.3%	89-97	
Turkeys										
Production (Mil. Lbs.)	5644	-0.4%	5791	2.6%	5,967	3.0%	5,860	-1.8%	5,960	1.7%
Exports (Mil. Lbs.)	582	9.0%	703	20.8%	798	13.5%	745	-6.6%	780	4.7%
Per Capita Supplies (Lbs.)	16	-3.0%	16	-1.8%	16.0	-0.6%	16.0	0.0%	16	1.9%
Eastern (Cents/lbs.)	90	18.2%	102	12.8%	106	3.5%	99.2	-6.1%	95-102	
Eggs										
Total Egg Production (Mil. Doz.)	6547	1.1%	6590	0.7%	6722	2.0%	6,877	2.3%	6,980	1.5%
Exports (Mil. Doz.)	258	6.7%	276	6.9%	292	5.8%	256	-12.4%	302	18.0%
Eggs Per Capita Supply	248	-0.1%	248	-0.1%	250	0.8%	252	0.8%	256	1.7%
Eggs, New York (Cents/doz.)	106	3.2%	115	8.5%	117	1.8%	121	3.2%	110	-9.2%

* F = Forecast.

Source: U.S. Department of Agriculture and the University of Georgia.

about 6 percent lower than 2013's record. Prices will be off 2013's pace most in 2014's first half, falling by at least 12 percent, but still averaging in the low to mid-90 cents per pound range. The last half of 2014 should bring comparable prices to those of 2013 provided production growth moderates.

While the 2014 broiler price is expected to decline from 2013, profit prospects are good given the expected continuation of significantly reduced production cost. The industry goes into 2014 knowing there has been a fundamental shift in feed prices, and that lower prices should persist the entire year. Adequate feed grain supplies provide a cushion against adverse 2014 crop conditions, a comfort the industry has not experienced in the last five years.

The threats to industry profitability seem low. Excessive industry production growth and/or broiler demand problems seem the greatest concern for 2014 and 2015. The history of the broiler industry has been one of aggressive growth when faced with similar cost and return margins expected this year.

Turkey prices and returns

Turkey production shrank by 2 percent in 2013, as compared to the previous year. In 2013, producers endured large frozen turkey supplies overhanging the markets. The prior two profit-starved production years provided little reason for production stability. Heading into the all-crucial 2013 Thanksgiving fourth quarter, producers decided to pull the plug on production.

Even with lower feed cost, turkey production is expected to decline by about the same amount next year. 2014 production declines will not likely be reversed until 2014's last quarter. Provided the production cut holds, producers may find it a good profit year even if the yearly price is expected to remain around 2013's turkey price.

Egg industry outlook

Egg producer markets looked similar to 2013's broiler markets. Record table egg prices and lower production costs combined with anticipated broiler growth should result in an increase in total egg supplies.

Egg production includes both table eggs and hatching eggs. With 2013-2014's broiler hatching flock fueling the anticipated broiler expansion, hatching egg producers will be called to increase production.

2013's average table egg price was more than 3 percent higher than in 2012 despite a modest growth in supplies. With the rate of expansion increasing in 2014, prices are likely to fall by 9 to 10 percent but will remain well above the \$1 per dozen level. In fact, the forecast price of \$1.10 per dozen should keep producers in the black given the reduction in feed cost. Table egg producers should keep an eye on the last two years' growth and the expected accelerated growth in 2014 of per capita supplies. Of the last eight years, only 2012 to 2014 found consumers faced with increasing egg supplies per person.

Agritourism

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Agritourism is a commercial enterprise at working farms or agribusinesses conducted for the enjoyment or education of visitors, and that generates additional on-farm income for the owner. It represents a number of ventures ranging from farm stands, U-pick, farm stays, tours, on-farm classes, fairs, festivals, pumpkin patches, Christmas tree farms, winery weddings, orchard dinners to youth camps, barn dances, hunting or fishing, guest ranches, horse back riding, hunting and more.

The 2012 Farm Gate Report estimates that agritourism and nature-based tourism generated \$194 million dollars, up significantly from an estimated \$122 million in 2011¹. Both the growth in GDP and the increase in employment will benefit agritourism operations in 2014.

According to the most recently available U.S. Department of Agriculture data, nearly two-thirds of all U.S. adults (87 million) have taken a trip to a rural destination within the last three years. The USDA estimates that more than 82 million people, including approximately 20 million youth and children under age 16, visited farms in that time period, creating a significant market for farmers and agribusinesses.

According to survey results, Georgia's agritourism operators are planning to add new activities to their existing agritourism operation in the upcoming year. In addition, the majority are planning to make facility improvements such as adding additional restroom facilities and parking. These facility improvements suggest that they are anticipating larger crowds in the future. The wide appeal of agritourism continues to draw visitors, and the industry is set to grow in 2014.

A number of the factors that have contributed to agritourism's popularity are still in place and will positively impact agritourism in 2014. The first is people's

desire to become more connected to the land and share this experience with family and friends. The continued growth in both local foods and "know your farmer" are also positively impacting agritourism across the state. Additionally, there are three primary economic factors that will impact agritourism and nature-based tourism in Georgia in 2014.

(1) Fuel prices

Fuel prices have the potential to positively impact agritourism in 2014. Fuel prices have fallen significantly in the second half of 2013. Given that school field trips are important to agritourism operations, anticipated lower on-road diesel costs in 2014 may benefit Georgia's agritourism. The Energy Information Administration projects on-road diesel prices to fall in 2014 to \$3.76 per gallon, down \$0.20 from the 2013 anticipated average. This is attributed to weaker global demand and continuing declines in crude oil prices. The 2014 national annual average gasoline prices are forecast to be similar to the national annual average forecast for 2013. Consumers have become accustomed to higher fuel prices, and the fact that they are not expected to change significantly from 2013 will likely have no impact on travel plans.

The reduction of airlines' fleet size has reduced the supply of seats, which has led to an increase in airfares. At the same time, prevailing fuel prices will make travel by automobile relatively less expensive, benefiting local and regional tourism venues. Leisure travelers will be encouraged to get in their automobiles to see area attractions.

(2) Tax revenue

Georgia is expected to experience an increase in tax revenues, and both GDP and personal income are expected to rise

in 2014. Following the 2013 fiscal year, the 2014 state 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.

(3) Unemployment

Georgia's economy continues to grow and is expected to grow by 3 percent in 2014. This combined with the growth in the housing industry will ease unemployment across the state. Anticipated export demand and continued growth in domestic demand will lead to increased employment.

The 2013 rebound was positive but incremental. Georgia's non-farm employment level is expected to increase by 1.8 percent in 2014. As more people find jobs, they will experience an increase in disposable household income and be more likely to visit agritourism operations.

Leisure travelers

The anticipated growth in both employment and wages in 2014 will positively impact leisure travel, as long as there is not a major economic shock to the U.S. and Georgia's economies. Industry figures show that domestic leisure travel will grow by about 2 percent in 2014. People are still seeking authentic and cultural experiences, which will positively impact agritourism and nature-based tourism in Georgia.

The average leisure traveler is approximately 48 years of age. Approximately 36 percent of leisure travelers are between 35 and 55 years of age. These travelers generally travel with children, making them excellent candidates for agritourism operations. Even more promising is the fact that an estimated 20

percent of leisure travelers are 25-34 and are also likely to have smaller children in tow.

Inbound, international travel to the U.S. is forecast to increase in 2014, which will benefit Georgia agritourism venues that have historical themes. Georgia is one of the top U.S. travel destinations for international travel. Visiting historical venues ranks in international travelers' top five activities.

Domestic leisure travelers are still looking for escapes and are into exploring new and adventurous activities. As a result, they are incorporating winery visits, horseback riding, local food venues, festivals and more into their quick, get-away leisure travels.

According to the Energy Information Administration, gasoline prices are expected be similar to the 2013 national annual average. As a result, prevailing fuel prices

will be partially offset by increased fleet fuel efficiency, making automobile travel affordable to most Georgians and allowing them to visit agritourism venues across the state.

School field trips

Hopefully the continued economic recovery and growth in the housing market will help fuel county tax revenues. However, the boom in the housing market may not be enough to return county coffers to previous levels.

Georgia experienced a steep decline in home prices during the recession and housing prices have not entirely rebounded, which negatively impacts county tax collections. These factors are expected to lessen somewhat in 2014.

The counties will still be watching expenditures and may retard the growth of school field trips. However, some schools and systems have started to recoup the cost of field trips by increasing student contributions to help cover the total cost of the field trip, not just admittance.

Emerging issue

A persistent issue still faces the industry: The need for access to liability insurance. Only 71 percent of agritourism operations reported they had 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.

Footnote:

¹This figure does not include hunting lease revenue figures.

Biofuels

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The primary driver of biofuel is the price of petroleum fuels (gasoline and diesel fuel). As the price of petroleum fuels rise, the demand for substitute fuel rises, leading to an increase in biofuel prices.

According to the Energy Information Agency, the 2013 annual retail price of regular gasoline is expected to be \$3.44 per gallon (Figure 1). This price is expected to fall in 2014 to an average annual price of \$3.34 per gallon, resulting in a similar decrease in biofuel prices.

Ethanol

Corn ethanol production started growing significantly in the early part of this century. In addition, the introduction of the Environmental Protection Agency's Renewable Fuel Standards (RFS) has fueled this growth to a point where ethanol production and use grew faster than the mandates implemented starting in 2006.

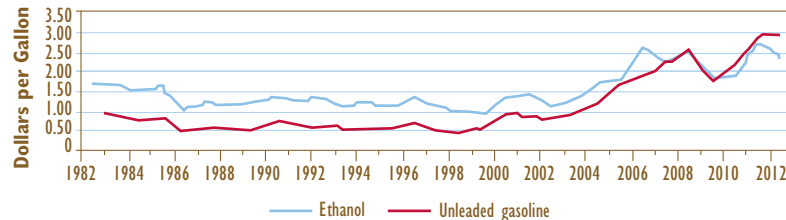
After years of increasing production and use, ethanol production was negatively impacted by the drought in the Corn Belt. The drought that started in the summer of 2012 caused a sharp increase in corn prices.

The increase in corn prices resulted in fuel ethanol production falling from the average of 900,000 barrels per day in the first half of 2012. Production remained at this level through the first half of 2013, which was also below the mandated RFS levels.

However, the easing drought conditions increased corn acreage and combined with higher yields to result in a decrease in corn prices. Therefore, production is expected to return to pre-drought levels during the second half of 2013, with an average production of 870,000 barrels per day or approximately 13.3 billion gallons in total for the year.

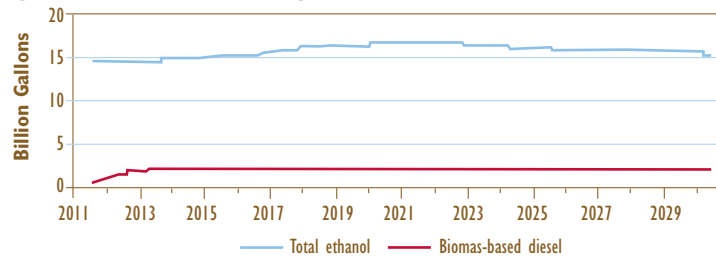
The moderate increase in 2013 production was also precipitated by increasing gasoline and ethanol prices. These conditions have allowed producers

Figure 1. Wholesale price of ethanol and unleaded gas in Nebraska, 1982-2012.



Source: Nebraska Ethanol Board.

Figure 2. Biofuel consumption forecast.



Source: Energy Information Administration.

to generate a profit. The return of and the ability to maintain profitability will be dependent on lower corn prices, stable or higher ethanol prices and the continued, strong demand for distillers grain.

Ethanol production is expected to increase again in 2014 with production reaching 915,000 barrels per day for a total production of 14 billion gallons for the year. This increased production will come from idled facilities coming back on line.

The Energy Information Administration expects ethanol's share in the gasoline pool to increase from an average volume of 9.6 percent in 2012 to nearly 11 percent by the end of 2014. The EIA specifies that the E15 and E85 fueling infrastructure will need to increase in order to allow for the volume increase. However, the growth in the ethanol market is expected to be limited by the minimum EPA mandate use of ethanol in U.S. fuel blends going forward (Figure 2).

Biodiesel

Given the volatility in the ethanol market, ethanol producers are now staring to recover the corn oil for use in biodiesel production as a means to generate additional revenue.

Approximately 304 million pounds of corn oil were used in diesel production in 2011. That number has increased to more than 660 million pounds in 2013, and it is expected to continue to increase.

Biodiesel production from the Midwest region was 67 percent of the U.S. total. Production came from 110 biodiesel plants with operable capacity of 2.1 billion gallons per year. Georgia has three producers located across the state with a 20 million gallon per year capacity. Biodiesel production has increased 111 percent from 2000 to 2011 and is expected to remain at this level. There are no drivers of biodiesel demand aside from mandates, so production is expected to increase 2-3 percent for the foreseeable future (Figure 2).

Value-Added Agribusiness

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Food and fiber industries continue to have 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.

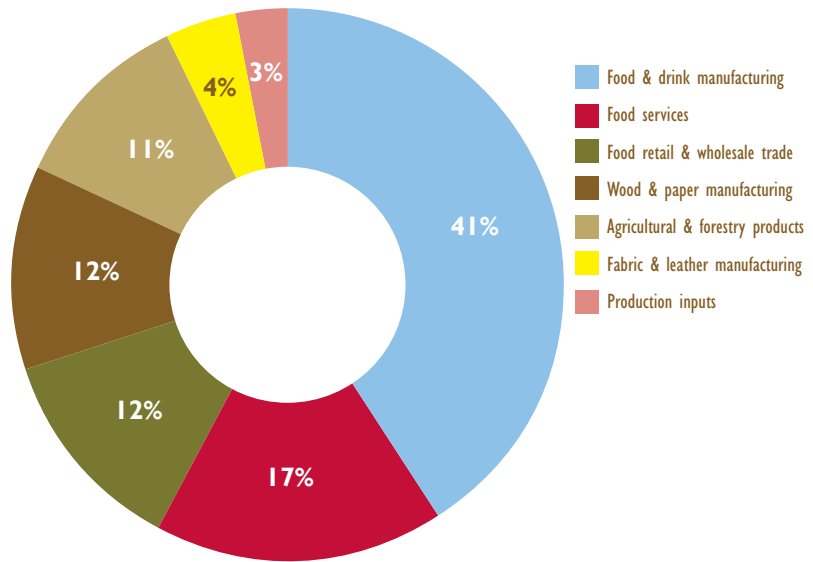
In 2011 (most recent data available), the total food and fiber sector employed 707,994 Georgia workers and had annual sales of nearly \$111 billion. This magnitude ranks the this sector the highest among all of Georgia's economic sectors, with nearly 14 percent of the total employment in the economy (more than 15 percent of the economy's output) and more than 11 percent of the value added.

The largest value-added sector is food and drink manufacturing, making up more than 41 percent of the industry and encompassing a wide variety of products (see figure).

According to an IBISWorld forecast, the agribusiness industry will grow steadily through 2018 with improving economic conditions broadening the demand for agricultural products and services. Some of the sectors that demand value-added products are supermarkets and grocery stores, convenience stores, meat markets, chain restaurants, single location, full-service restaurants, and caterers. It's expected that supermarkets continue the trend of bypassing wholesalers in order to get better food prices. Since growth can depend on consumer spending patterns and popular concerns, it is important to keep an eye on upcoming trends.

Recent Hartman Group research shed new light on the long-held idea of females being the only member of the household making food purchases. With similar frequencies, both men and women were found to drive food sales, particularly from grocery stores and mass-marketing chain stores. In fact, men averaged more grocery store visits per month than their female

Georgia food and fiber sector output by industrial sector, 2011.



Source: Economic Importance of Food and Fiber in the Georgia Economy, UGA Center for Agribusiness and Economic Development.

counterparts (8.2 visits compared to 7.5 visits, respectively).

Trend watchers make varying and sometimes contradictory predictions, but local, sustainable, farm-to-table and classic foods are consistent themes. This can be viewed as consumers seeking unpretentious food—food that is pure and simple—and eaten by an educated consumer. Local is often evolving as regional, paying homage to the location of the country or the world from which the ingredients or recipes originate. These educated food consumers are also seeking sustainability and connections to the farmer and the chef. Furthermore, despite popular health concerns, consumers still want delicious food that meets all of their demands without compromise.

Last year we saw how vegetables in all forms have become an accepted staple for healthy eating, even as the main dish, because of their wide-ranging appeal and health benefits. This year, the vegetable trend will go even further with food processors making sweets using vegetables, especially

in items such as cookies or muffins.

During 2013, U.S. processed vegetables accumulated sales of more than \$13 billion. Because sellers of processed vegetables have been creative in appealing to their consumer demands, sales growth of these products are expected to increase through 2018. Mintel expects that processed vegetable sales will increase approximately 17 percent from 2013 to 2018, reaching \$15.8 billion.

Awareness of the American obesity epidemic and relatively low levels of vegetable consumption among most consumers continues to create an environment for growth in the processed vegetable sector. Almost one half (46 percent) of consumers think that options such as precut, prewashed, or steam-in-bag vegetables should be more available. Value-added vegetable producers have opportunities to capture additional consumer sales through innovations in flavor, variety, convenience or packaging.

Timber

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The economic outlook for the end of 2013 is unclear, but should brighten as we enter 2014. Analysts believe that 2014 will show more growth than the last part of 2013, but not by much due to the government shutdown. Primary economic indicators that drive timber market development in the South (real GDP growth, housing starts, and commodity and energy prices) have been fair in the past quarter of 2013 and are projected to sustain moderate growth in 2014.

Commodity prices

Commodity prices are expected to follow demand for the indicators of end-use.

Random Lengths softwood framing lumber prices decreased 6.8 percent in the third quarter to \$353.67/MBF on poor housing starts.

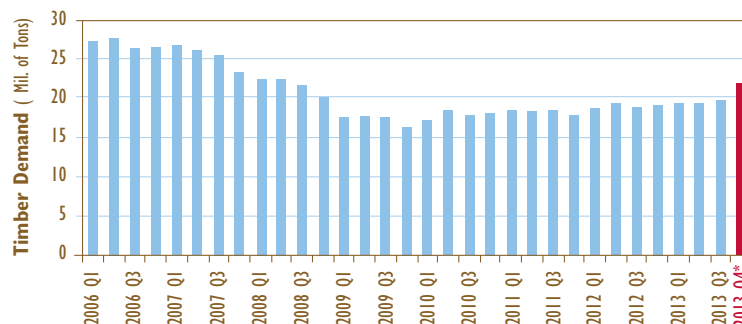
Pulp prices (Northern bleached softwood kraft Europe pulp) increased 1.9 percent in the last quarter adding approximately \$16.23/ton in the third quarter of 2013. Our outlook position, due to delisted CME NBSK Europe pulp futures, puts pulp futures on a slowly inclining trajectory to \$893.80/ton by 2013's end, following the highs in the third quarter. 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.

Local market conditions for stumpage vary. For up-to-date market prices, please check with local forestry consultants.

Demand outlook

Demand for pine grade timber¹ has only increased by 1 percent throughout the South, due to weak housing numbers (see figure). Mills noted improving conditions with end-product demand and improving inventories. The largest grade demand increases were observed in Georgia and

Demand for pine grade timber in the southern U.S by outlook, 2006-2013.



* F = Forecast

Source: UGA Center for Forest Business: Wood Demand Research Program.

Oklahoma. Demand for pine grade in all other Southern states remained steady except in North Carolina, where pine-grade demand dropped 10 percent.

Hardwood grade (including timber used in lumber and pallet production) demand declined 0.5 percent in the third quarter. The largest demand declines were reported in Georgia, North Carolina and Texas, but demand in Tennessee and Virginia increased.

Mills across the South reported improving lumber demand and prices in 2013. An increase in demand in the last quarter on strong housing starts and diesel price declines did not materialize as expected. Timber inventory on the stump that was conserved 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.

Pine pulpwood² (raw pulp material) demand increased 3 percent across the South. While Tennessee, North Carolina and Louisiana reported significant

consumption increases, demand declined in Florida, Georgia and Virginia. Although outlook depicts strong growth in the next quarter, it should be considered as a likely, maximum possible scenario. The closure of IP's Courtland, Alabama paper mill will definitely affect demand in the region through the year.

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 pulpwood-sized trees) 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 demand of 36.8 million tons, 14 percent over the total timber demand in 2012. These include two pellet projects in southern Georgia, which are expected to start by late 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. Therefore, declining pulpwood demand from newsprint and paper consumption

in 2014 will likely be compensated for by an increase in demand from producers of Oriented Strand Board and bioenergy. At the local operating level, the aggregate impact will likely lift timber prices in 2014. Again, a major concern of many in the business is a logger and logging capacity shortage.

Overall, the outlook for timber markets in the U.S. and, particularly, the South is positive with the potential to be driven

higher by European demand for grade hardwood and Chinese demand in general.

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.

References: CME futures contracts. Freddie Mac and Fannie Mae economic outlook. *Housing Market Momentum Bodes Well For Economy and Retailers*, Condor Capital article, PR Newswire, Random Lengths. Timber Mart-South, Q3 2013. Wood Demand Report, Q3 2013, Center for Forest Business: www.ugacfb.com/research/wdrp.

Footnotes:

¹Grade 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.

²Pulpwood 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—particularly pellets.

³Includes 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))

Honey Bees

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For the Piedmont region and north Georgia, the honey crop for 2013 was well below average, yet the South saw particularly good flows. Location determined whether beekeepers had an above- or below-average year. In these central and northern areas, some estimates ranged as low as 20-25 percent of normal yield—with Sourwood coming in even lower at 10-15 percent of normal. Poor weather conditions, which included record amounts of rainfall and cool temperatures, were mostly to blame.

Thus, Georgia beekeepers are frustrated by short supplies of locally produced honey in the face of high demand. Nationally, honey prices rose 11 percent from 2011 to 2012 and an additional 10 percent from 2012 to 2013, yielding record highs. With little honey reserves, it is reasonable to expect that prices will continue to increase in early 2014. However, prices later in the year will be subject to changes in the supply from the spring and later harvests.

Outright colony failure, due to a lack of stores, has been another consequence of the erratic weather. Outside of the Coastal Plains, our honey bees were unable to

forage and collect the necessary nectar and pollen in 2013. Understandably, beekeepers have reported a significant increase in the need for supplemental feeding to improve the chances of winter survival for their remaining hives. Hopefully, 2014 will see a moderation in weather patterns, and resource levels should turn around. Only time will tell.

Higher-than-normal varroa mites and small hive beetle populations were reported across the state as well. In late summer and fall, most beekeepers were administering mite treatments and applying other techniques to reduce pest-population levels.

On the bright side, a tremendous public interest in beekeeping has continued to take hold across the state. It's not just backyard beekeeping that has surged, but the number of sideline businesses has expanded, as well. A corollary is that the number and size of beekeeping clubs and associations have also increased. All of this is certainly due, at least in part, to all the media attention in recent years on Colony Collapse Disorder (CCD) and the importance of honey bees and pollination.

This has been great for sustaining high demand in the market for queens, packages and nucleus colonies, which have seen steady increases in sales—in some incidences, as much as 15-20 percent over the last two years. Indications are that the 2014 season will follow the same trend; some suppliers are already reporting anticipated shortages based on pre-orders before the end of 2013. High demand, along with increases in lumber, metal, sugar and labor costs, has vaulted 2014 package prices by \$7-10 (a 10 percent increase), queen prices by \$1-2 (a 5 percent increase) and nucleus colonies by \$20 (a 15 percent increase).

The demand for pollination services looks strong for the upcoming year, as long as farmers are able to get crops planted in the fields. Truckloads of bees from Georgia will be heading west by mid-January, as fees for almond contracts are at an all-time high. Beekeepers across the state and nation are diligently trying to keep colonies healthy and strong in order to supply the more than 1.5 million colonies necessary for the 800,000-plus acres of almond-bearing trees.

A series of horizontal dotted lines for taking notes.



This valuable guide is provided as a companion to the 2014 Georgia Ag Forecast series.

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Georgia Ag Forecast is a University of Georgia College of Agricultural and Environmental Sciences program made possible through an endowment from the Georgia Farm Bureau and support from the Georgia Department of Agriculture and the Georgia Agribusiness Council.