

2020 Georgia AG FORECAST



STRATEGIC INSIGHTS FOR GEORGIA'S NO.1 INDUSTRY



College of Agricultural &
Environmental Sciences
UNIVERSITY OF GEORGIA

Welcome

Welcome to the 2020 Georgia Ag Forecast. This is the fourth time I've written a letter of welcome for this event. Unfortunately, each of these letters referenced a year marred by natural disasters, depressed commodity prices, and uncertainty in trade and the commodities market. However, each year we've managed to pull through these challenges together.

This year is no different.

Our outstanding, world-class faculty of agricultural economists have prepared a comprehensive guide to navigating the year ahead. One of our esteemed faculty, Jeffrey Dorfman — Georgia's new State Fiscal Economist and one of our featured speakers in this year's Ag Forecast series — says these reports will help Georgia's producers "cut through the noise and focus on the fundamentals."

Predicting markets and prices is not an exact science. At any time, as we certainly have been reminded over the past four years, Mother Nature can come calling and turn all of our well-laid plans into chaos. We hope our collective expertise will give you ample information to help you make sound decisions for your operations, your businesses, your families and your future.

We value your trust in us. And we pledge to continue to do all we can to keep you on the cutting edge of science and technology; well-stocked with solid, data-driven information; and constantly supplied with high-quality educational opportunities to help you succeed.

Sincerely,

A handwritten signature in black ink that reads "Sam L. Pardue". The signature is fluid and cursive, with a large initial "S" and "P".

*Sam Pardue
Dean and Director
University of Georgia College of Agricultural and Environmental Sciences*

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The 2020 Georgia Economic Outlook

Jeffrey M. Humphreys

Director of the Selig Center for Economic Growth, Terry College of Business

My 2020 economic forecast for Georgia calls for the economic expansion to continue, but I expect growth in state GDP and employment to decelerate significantly. I am counting on six forces to keep Georgia's economy growing in 2020. First, consumer spending will be the most powerful driver of Georgia's economy. As long as consumer spending grows, the record-long economic expansion continues. Second, the U.S. Federal Reserve will support the economy by lowering interest rates. Third, homebuilding will increase. Fourth, the large number of projects in Georgia's economic development pipeline will help to sustain economic growth. Fifth, higher defense spending will be very good for Georgia. Finally, Georgia's above-average population growth will sustain economic growth.

Despite these powerful economic drivers, Georgia's economy will come close to stalling out in 2020. That is because the economic headwinds have intensified. I put the probability of a 2020 recession at almost 50%. I do not make a recession call until the probability of recession is at least 60%. I am close to forecasting a 2020 recession, but I am not quite there.

The trade war that began in mid-2018 is the main recession risk and strongest economic headwind. In addition to the direct effects of the tariffs and other non-tariff barriers to international trade, each escalation of the trade war damages business confidence, which leads to less capital spending and less hiring. There are no precedents

UNITED STATES BASELINE FORECAST 2019-2020

United States	2015	2016	2017	2018	2019	2020
Gross Domestic Product, Bil. of 2012\$	17,403.8	17,688.9	18,108.1	18,638.2	19,066.9	19,295.7
Percent change	2.9	1.6	2.4	2.9	2.3	1.2
Nonfarm Employment (Mil.)	141.8	144.4	146.6	149.1	151.0	151.9
Percent change	2.1	1.8	1.6	1.7	1.3	0.6
Personal Income, Bil. of 2012\$	15,253.3	15,487.6	15,934.1	16,477.4	16,849.7	17,048.1
Percent change	4.6	1.5	2.9	3.4	2.3	1.2
Personal Income, Bil. of \$	15,717.8	16,121.2	16,878.8	17,819.2	18,549.8	19,124.8
Percent change	4.8	2.6	4.7	5.6	4.1	3.2
Unemployment Rate (%)	5.3	4.9	4.4	3.9	3.8	4.1
CPI-U, Ann. % Chg.	0.1	1.3	2.1	2.4	1.7	1.7

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

to the current level of trade policy uncertainty. There are other risks to the economic expansion as well. The main domestic risks include a stock market correction, a policy mistake by the Federal Reserve, and a leveraged loan meltdown. There has also been an inversion of the yield curve. Geopolitical risks abound, ranging from the possibility of war in the Middle East between Iran and Saudi Arabia to Brexit.

My baseline forecast is that Georgia's economic growth slows substantially in 2020, but does not stop. Georgia's inflation-adjusted GDP will increase by 1.0%. This is much smaller than the 2.6% growth estimated for 2019 and the smallest annual increase in GDP since the Great Recession ended in 2009. Georgia's 2020 GDP growth rate will be 0.2 percentage points lower than the 1.2% rate estimated for U.S. GDP. Georgia will underperform the U.S. economy because of greater exposure to the trade war than the average state's economy. Georgia is the nation's eleventh-largest export state and the seventh-largest

import state. Any major step back from globalization hurts Georgia's prospects for economic growth.

Georgia's non-farm employment will rise by 0.5% in 2020, which is about 21,000 new jobs, less than a third of the 69,000 jobs added in 2019. Georgia's rate of job growth in 2020 will be slightly lower than the 0.6% gain expected for the U.S. The trade war hits Georgia harder than the average state, especially rural Georgia where trade-dependent economic activity is more concentrated.

In 2020, the pattern of growth across Georgia's major industries will vary. Education, health care, professional and business services, and hospitality are essentially non-traded industries that are relatively sheltered from the trade war. These industries also have good long-term growth prospects and tend to do well regardless of the ups and downs of the business cycle. As a result, education, health care, professional and business services, and hospitality will account for the vast majority of new jobs created in Georgia in 2020.

In contrast, jobs will be lost in

GEORGIA BASELINE FORECAST, 2019-2020

Georgia	2015	2016	2017	2018	2019	2020
Gross Domestic Product, Bil of 2012\$	479.2	495.2	509.4	522.4	536.0	541.4
Percent change	3.3	3.3	2.9	2.6	2.6	1.0
Nonfarm Employment (thousands)	4,262.0	4,372.3	4,453.9	4,540.0	4,608.5	4,629.4
Percent change	2.8	2.6	1.9	1.9	1.5	0.5
Personal Income, Bil of \$	422.8	439.6	460.4	481.2	500.0	517.0
Percent change	6.0	4.0	4.7	4.5	3.9	3.4
Housing Permits, Total	45,549	51,675	51,240	59,315	54,158	54,984
Percent change	15.5	13.4	-0.8	15.8	-8.7	1.5
Unemployment Rate (percent)	6.0	5.4	4.7	3.9	3.9	4.4

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

agriculture and manufacturing, which are trade-dependent industries. Factors, in addition to the trade war, that dim the prospects for manufacturing include past appreciation of the U.S. dollar, a slowing global economy, and lower levels of business confidence.

On a more positive note, it will help that many of the manufacturing economic development projects announced by the Georgia Department of Economic Development over the last few years continue to build out, partially offsetting the drop in industrial production due to the trade war.

Retail and information jobs also will be lost in 2020, but those job losses reflect technology-driven restructuring rather than trade tensions or recessionary forces.

Jobs in transportation, logistics and distribution tend to move in lockstep with the overall economy, but the large number of logistics and distribution projects in Georgia's economic development pipeline will more than offset the negative impacts of the trade war. In addition, the move from bricks

and mortar retail to electronic retailing is shifting retail jobs to the warehousing, distribution and transportation industries. Plus, the 2018 opening of the Appalachian Regional Port is helping the Port of Savannah tap into new markets. When open for business in early 2020, the Mason Mega-Rail Terminal will provide more frequent and faster rail service to cities like Memphis, St. Louis and Chicago, as well as cities in the Ohio Valley. Put all that together and cargo volumes flowing through Georgia will outpace state and U.S. GDP growth. That will be quite an accomplishment for an industry that typically matches the performance of the overall economy.

Let us go through the main drivers of growth. The consumer will be the main strength of the 2020 economy. Consumer spending will increase because labor market conditions are good. I expect job creation to slow, but as long as it remains positive, the economy will operate close to full employment. That circumstance will support modest wage and salary growth. Another positive

for the consumer is that credit will be very inexpensive and it will be readily available. It helps that home prices have fully recovered in many areas and homes will continue to appreciate. That is important because real estate wealth tends to have a larger influence on overall consumer spending than equity-based wealth. Household finances are in very good shape. The personal savings rate is 8%, more than twice the rate prior to the Great Recession. Many homeowners have locked in historically low mortgage rates. Households' low financial obligations in combination with relatively high savings inspires confidence and makes it easy to service debt. Another factor that will encourage consumers to spend is that households' net worth is at an all-time high, exceeding its pre-recession peak by about 60%.

In mid-2019, the Federal Reserve reversed its monetary policy stance by lowering policy interest rates and halting reductions in the size of its balance sheet. In 2020, I expect one or two 25-basis-point decreases in the federal funds rate. Short-term policy interest rates will fall below the rate of inflation of 1.7% and therefore will encourage growth. In addition, the Federal Reserve will expand the size of its balance sheet to ensure that there is ample liquidity in the financial system.

Home sales and homebuilding will be important drivers of GDP growth in 2020, largely due to low mortgage rates and cyclical

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FINANCIAL OUTLOOK

Economic Outlook, *continued*

factors. Job growth has unlocked pent-up demand for housing that built up as young adults opted to stay at home a bit longer. Georgia's above-average population growth will provide impetus to the state's homebuilding industry. Another factor that will encourage people to buy homes is that rent affordability is at an all-time low. In 2020, the number of single-family home starts for new construction will increase by about 5%. The increase would be even bigger if not for recession fears.

Appreciating home values will give people the confidence to buy homes. As of mid-2019, Georgia's existing home prices were 19% higher than their pre-recession peak, but the degree of home price recovery varies widely within the state. For example, existing home prices in the Atlanta MSA were 26% higher than their pre-recession peak level, but in rural Georgia, home prices were only 4% above their peak value. On average, I expect home prices to rise about 3% in 2019 – almost double the rate of inflation, but much slower than the most recent year-over-year increase of 7%. The bottom line – home price appreciation will support growth in 2020, but to a lesser degree than in 2019.

Many of the economic development projects announced over the last several years will continue to build out and will provide a solid push to Georgia's economic growth. Due to its many competitive advantages, Georgia should continue to land high-profile economic development projects in 2020. Those projects will power economic growth. However, as national and global economic growth slows, Georgia will find that it is more difficult

to capitalize on its competitive advantages because the number of expansion and relocation projects that U.S. states are vying for will decline significantly. Georgia will continue to get an outsized share of the projects in contention, but the overall number of new projects announced in 2020 will be smaller than in 2019. That implies positive, but slower GDP growth in 2020 than in 2019.

In 2020, higher defense spending will be very good for Georgia, especially for communities that host major military bases. Military pay raises were good in 2019 and good raises are expected in 2020. President Trump's budgets are likely to favor military bases with missions similar to bases in Georgia. For example, the build out of the U.S. Army Cyber Command at Fort Gordon adds to Augusta's prospects for growth. Another example, in 2019, ICE announced plans to build a complex at Fort Benning in Columbus.

Demographic forces will be strong driver of Georgia's economy. From 2015 to 2019, corporate relocations and expansions brought more people to Georgia. That trend will continue. Georgia will be a very attractive destination for mid- and top-career movers. The nationwide recovery in home prices will give retirees the wherewithal and confidence to move to Sunbelt states. Due to tight immigration controls and federal restrictions on H-1B visas, international migration will not increase in 2020. Put it all together and Georgia's population will grow at a pace that is almost double the national average in 2020 – 1.0% for Georgia versus 0.6% for the U.S..

Due to differences in economic

structure and other factors, the economic prospects vary across the state's metropolitan and rural areas. Gainesville, Atlanta and Hinesville-Fort Stewart will lead in terms of the pace of job growth. Gainesville's success reflects the large number of expansion projects announced over the last five years, very strong population growth, a strong housing market and strong economic growth in neighboring counties. Atlanta's success reflects a strong innovation ecosystem, an educated workforce, above-average population growth and not too much dependence on traded sectors of the economy. Hinesville-Fort Stewart's success reflects the presence of the largest military installation east of the Mississippi River.

Bellwether metros will see job growth that roughly matches that of both the state and the nation. They include Warner Robins, Augusta, Athens, Brunswick and Rome. Stable metros that will see little or no job growth, but no net overall job losses, include Columbus, Dalton, Valdosta, Macon and Savannah. Albany will experience a small decrease in total employment, reflecting the area's high dependence on agriculture, out migration and less homebuilding.

I expect rural Georgia to be in recession in 2020. About 8,400 jobs will be lost in rural Georgia. Rural Georgia saw solid job growth prior to the beginning of the trade war in mid-2018, but the trade war hit agriculture and manufacturing very hard. Until trade tensions ease decisively and substantially, many of those jobs will not return to rural areas of the state.

The U.S. trade war with China and other trading partners is the

immediate and largest recession risk. Even without further escalation, the trade war may cause a recession and any major escalation will end the economic expansion. The higher tariffs alone are not large enough a percentage of GDP to push the economy into recession, but the trade war's pernicious indirect effects are capable of pushing both the U.S. and Georgia's economies into recession. The most economically damaging indirect effect of the trade war is heightened uncertainty, which crushes business confidence. Indeed, uncertainty regarding a disorganized trade policy lowers confidence more than a more orderly and predictable approach – especially among business leaders, which in turn lowers businesses' investment spending and net hiring. Other indirect effects that damage the economy include widespread disruption of supply chains and the retaliatory imposition of non-tariff barriers to trade. A quick and decisive de-escalation of the trade war would substantially reduce the risk of a 2020 recession. Nevertheless, there is a point where de-escalation of the trade war comes too late to stave off a recession. We are close to that point.

An oil price shock is another risk to the expansion. My expectation is that oil prices will not increase very much in 2020, but the political situation in several significant oil-producing countries is tenuous. The September attacks on Saudi Arabia's oilfields and processing facilities illustrates the geopolitical risks to global oil supplies. A war between Saudi Arabia and Iran would almost certainly push oil prices over \$100 per barrel,

triggering a recession.

A stock market correction or a financial panic is another recession risk. After all, price/earnings ratios are relatively high, the size of the junk corporate bond market is large, and risk taking in the form of leveraged lending to nonfinancial businesses appears excessive.

The yield curve is flashing red. In March, the spread between the three-month T-bill and 10-year notes inverted. In August, the spread between the two-year and 10-year notes inverted. The 2019 inversions signal that the odds of recession in 2020 are high. An inversion of the yield curve occurs when short-term interest rates exceed long-term rates. An inversion suggests that monetary policy is too tight given market participants' expectation for growth. Historically, a yield curve inversion is a very good indicator that a recession will begin within the next six to 18 months. False signals are rare. The 2019 inversions warn that the Federal Reserve made a policy mistake by raising interest rates too high

given the rapid escalation of the U.S.-China trade war. In 2019, the Federal Reserve took notice and quickly reversed course, cutting interest rates. Monetary policy has shifted to stave off, or battle, a 2020 recession. The Federal Reserve's 2019 pivot from a restrictive policy to a stimulative policy will help offset some of the economic damage inflicted by the trade war.

In closing, I am pleased to report that Georgia's economy will continue to expand. Georgia's prospects for growth reflect the strength of the consumer, Federal Reserve policy, more homebuilding, a pipeline full of economic development projects, more defense spending and favorable demographics. The risk of recession is high and the trade war is the main recession risk. A quick and decisive de-escalation of the trade war would improve the economy's prospects for growth, potentially allowing the record-long expansion to continue for some time. ■

Takeaways

- *Georgia's economic expansion will continue, but growth will decelerate significantly.*
- *The trade war is the main recession risk and the strongest economic headwind.*
- *The consumer will be the main strength of the 2020 economy.*
- *Home sales and homebuilding will be important economic drivers.*
- *Economic development projects will provide a solid push to Georgia's economy.*
- *Higher defense spending will be very good for Georgia.*

Peanuts

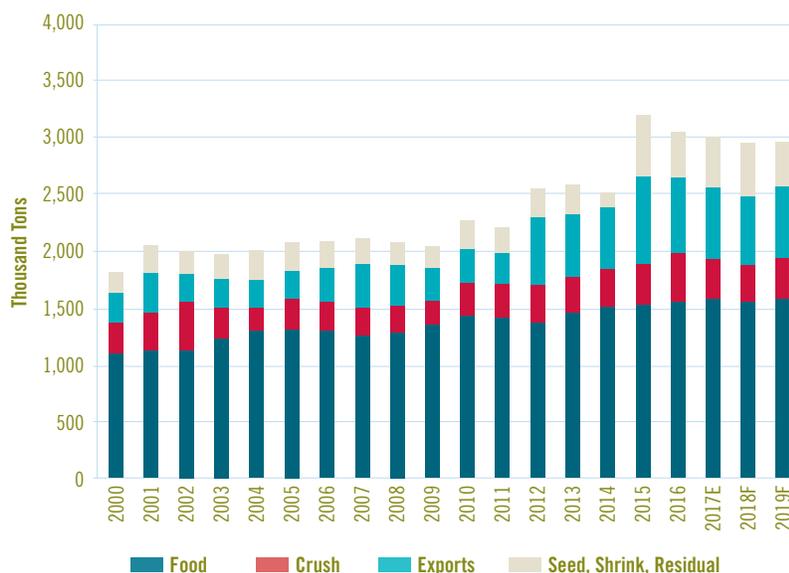
Adam N. Rabinowitz, Assistant Professor and Extension Economist
Department of Agricultural and Applied Economics, The University of Georgia

The 2019 peanut market has been relatively flat in Georgia as continued impact of stocks from record production in 2017 and the lack of growth in demand in recent years limits price growth for farmers. Forward contracts were around \$400 per ton, and with no alternative crop offering relatively higher prices, there was little competition for acreage. Thus, unsurprisingly, planted peanut acres in Georgia were up just 5,000 acres from 2018 to 670,000 acres. Meanwhile, total U.S. peanut acreage was 1.425 million acres, down just 500 acres from the prior year, marking the lowest level of plantings since 2014.

Even with acreage flat, yields remained strong in 2019, with U.S. Department of Agriculture estimates for November yields at 4,080 pounds for the total U.S. and 4,300 pounds for Georgia. These yields would be within 100 pounds of the respective total U.S. and Georgia yields from each of the past two years. The last major deviation from this point was in 2016 when total U.S. and Georgia yields were about 400 pounds less. That said, there are some indications that these yields might be slightly overestimated as dry weather in Georgia during 2019 limited some dryland production. Quality of the crop, as determined by the Georgia Federal-State Inspection Service, was also a concern from the 2019 growing season as aflatoxin was reported at its highest rate since 2016.

Even with potentially lower yields in Georgia than estimated, ending stocks in the U.S. will

Figure 1. U.S. Peanut Disappearance



Source: USDA Economic Research Service as of November 13, 2019

remain relatively high at more than one million tons. Without significant decreases in production in recent years, the demand side of the market has needed to respond to alleviate the excess supply. Unfortunately, export markets are typically the quickest to respond but have failed to do so. Forecasts are for export markets to rebound from their recent lows of the 2018-2019 marketing year, yet they are still expected to be 17% lower than their high during the 2015-2016 marketing year. This is due to two reasons. The first are recent trade disputes that have resulted in retaliatory tariffs on agricultural products, including peanuts. The second is increased global competition, most significantly from Argentina, Brazil and India. There is also a potential

for further complications in exports as increased testing occurs on shipments entering the European Union.

Overall, demand (shown in Figure 1) is not projected to increase during the 2019-2020 marketing year, staying right around three million tons. The last significant movement in demand was during the 2015-2016 marketing year when total disappearance increased about 700,000 tons from the year before. A year later, disappearance dropped about 200,000 tons and has stayed right around three million tons. Focusing on the individual components, domestic food use and crush are expected to return to demand levels from two years ago after a slight decrease in the 2018-2019 marketing year.

With little demand growth and flat prices, government programs have had a significant impact on farm income for peanut producers. The USDA has continued the Market Facilitation Program (MFP) in response to retaliatory tariffs that took place during 2019. Peanuts were now included in the direct payments through MFP as part of the total planted acreage eligible for a county-level payment rate. As of the writing of this publication, two of the three potential payments have been made and the third is expected to be announced in January. In addition, the American Peanut Council has received \$3.4 million from the Agricultural Trade Promotion Program to help farmers increase access to new export markets.

With the passage of the Agriculture Improvement Act of 2018, the peanut safety net program in Title I has remained intact. This includes a Price Loss Coverage (PLC) reference price of \$535 per ton. While the payment in October 2018 was \$77 per ton, the October 2019 payment increased to \$105 per ton as a result of lower prices during the 2018-2019 marketing year. Prices during the 2019-2020 marketing year are expected to be even lower, and thus estimates for the October 2020 payment are expected to be around \$115 to 120 per ton.

Looking ahead to 2020, one needs to consider the continued excess supply that resulted from record production in 2017 and the stagnant demand during the past four years. This means

Takeaways

- *Record production in 2017 continues to limit price movement for peanut producers as ending stocks remain high.*
- *Peanut demand forecast flat for the fourth year in a row.*
- *Prices near \$400 per ton are expected.*

that a reduction in production is warranted and that begins with a decrease in planted acres. However, a reduction in planted acres is unlikely to occur, as alternative crops in Georgia do not present much better opportunities for higher net returns. A price near \$400 per ton is expected at this point and farmers are advised

to consider their individual risk tolerance and what makes sense for their business given their own financial situation. One strategy at current market prices might include contracting for some of the expected production and waiting for the market to develop throughout the year. ■

Cotton

Yangxuan Liu, Assistant Professor, Department of Agricultural and Applied Economics, University of Georgia

The year 2019 has been a tough season for cotton growers. With the ongoing trade negotiations between the U.S. and the rest of the world, uncertainties hindered global economic growth, which resulted in low cotton prices for the past year. Looking ahead to 2020, cotton producers need to be aware of and prepared for the continuous uncertainty in the global cotton market. Whether we can experience better cotton prices for 2020 is yet to be seen. Factors influencing 2020 crop prices include global economic growth, U.S. production and stock, global demand, U.S. exports, and trade situations.

In 2019, U.S. upland cotton planted acreage is 13.5 million, which is the third highest for the past decade (Figure 1). The 2019 U.S. upland cotton production is forecast at 20.1 million bales, which is the second highest for the past decade, up 2.5 million bales from 2018. There are three major contributing factors to the increase in cotton acres in recent years. First, high cotton prices in 2018 encouraged more cotton production for 2019. Second, declining commodity prices during planting season due to trade tension with China makes cotton more competitive with other row crops. Third, the Bipartisan Budget Act of 2018 authorized seed cotton as a covered commodity and eliminated generic base, thus eliminating eligibility for payments when planting other covered commodities on farms with generic base.

During the years with large production, U.S. cotton exports

Figure 1. U.S. Upland Cotton Acres Planted, Harvested, and Average Yield per Acre

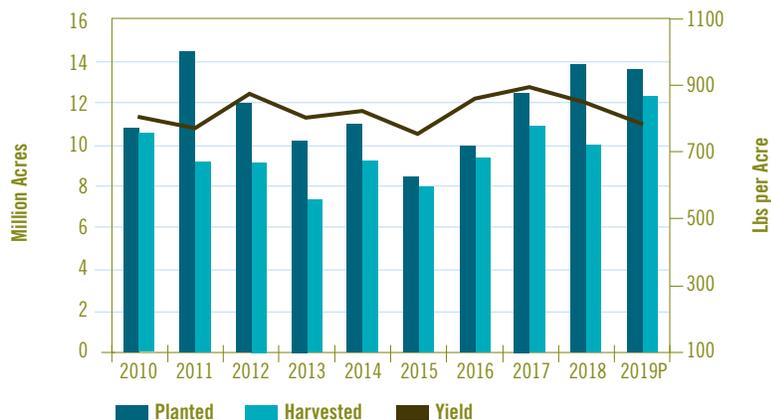
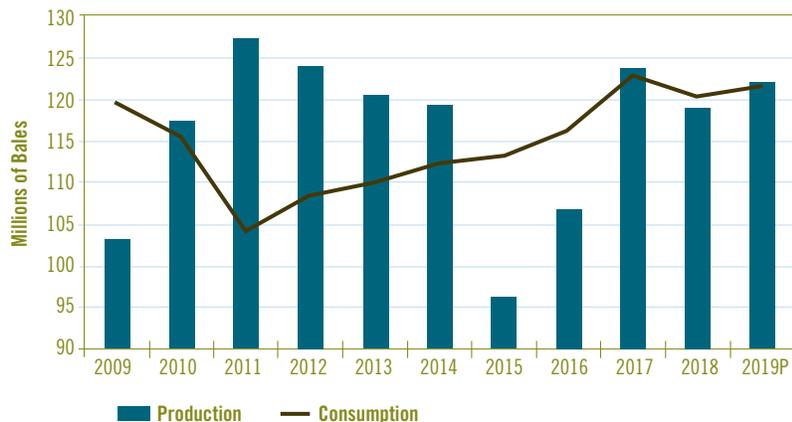


Figure 2. World Cotton Supply and Demand



are expected to increase. Exports are currently forecasted to be 16.5 million bales for the 2019-2020 crop year, which would be the second highest on record after 2005. The U.S. ending stocks for the 2019-2020 crop year are expected to increase to 6.1 million bales, which is the highest ending stocks for the past decade. The increase in supply due to increasing production and ending stocks in the U.S. creates

downward pressure on U.S. cotton prices.

World cotton production is currently forecast at 121.9 million bales, up 3.1 million bales from 2018 (Figure 2). World cotton use or demand has improved in recent years, but the upward trend has slowed down for the past two years due to the uncertainty of the global economy and trade. World Economic Outlook also projected slower longer-term

economic growth, which indicates a slower increase in cotton consumption. The current world cotton consumption is forecast at 121.5 million bales. Expanding world supplies over demand has increased the global stock-to-use ratio, which is often accompanied by a fall in global cotton prices.

Several other issues make cotton profitability challenging. The local cotton basis has been lower than in previous years since the implementation of Chinese tariffs. Before the tariff on cotton was implemented, China made purchases in large quantities, and often large shipments were sent to the same destination. However, after the tariffs on cotton were implemented, the large shipments to China were replaced by smaller shipments to other importers. The change in the size of the shipments has increased transaction costs for merchants and reduced the local basis for cotton. The other issue here is that China accounts for more than 30% of apparel imported by the U.S., of which 30% is made of cotton. The U.S. tariff on Chinese apparel makes it more expensive for U.S. consumers to buy cotton apparel, which reduces the demand for apparel.

In 2019, Georgia farmers planted 1.4 million acres of cotton, which is the third highest planted acreage for the past decade, down 30 thousand acres from 2018. The average cotton yield is forecast at 932 pounds per acre. Production is forecast at 2.7 million bales, which would be the second highest on record after 2012.

Looking forward for 2020, U.S.

Takeaways

- *U.S. cotton acreage and production are more likely to be down for 2020.*
- *Uncertainties in the cotton market are expected as a result of the ongoing trade negotiation and the slowing down of the global economy.*
- *Producers need to be aware of the continuous risk of downside price weakness in 2020 and need to consider strategies to improve productivity or cut costs.*

cotton acreage and production are more likely to be down. Uncertainties in the cotton market are expected as a result of the ongoing trade negotiation and the slowdown of the global economy. As this is being written, futures prices (Dec. 20) for the 2020 crop are currently around 67 cents per pound. The cash prices for the current calendar year of 2019 ranges from low of 54.41 to high of 74.46 cents per pound.

Producers need to be aware of the continuous risk of down-side price weakness in 2020 and need to consider strategies to improve productivity or cutting costs. The optimistic likely price for 2020 is 67 to 72 cents per pound or better. The pessimistic likely price for 2019 is 62 to 66 cents per pound. For planning and budgeting projections, a price of 66 to 70 cents per pound is suggested for 2020. ■

Fruits and Nuts

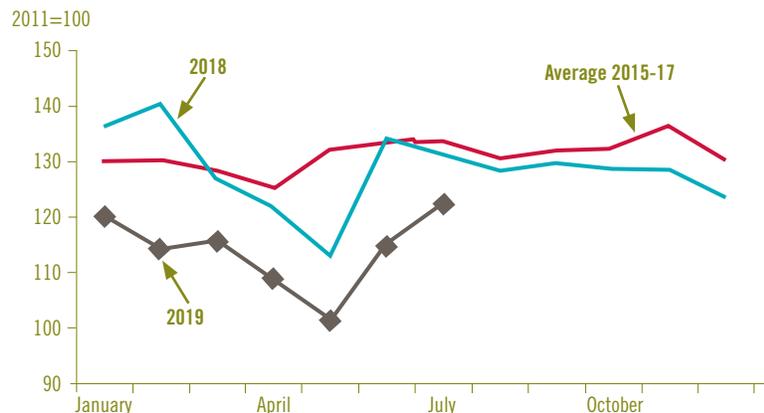
Esendugue Greg Fonsah, Professor, REI Coordinator and Agribusiness Extension Economist, Fruits, Vegetables and Pecans, Department of Agricultural and Applied Economics, University of Georgia

The producers price index took a nosedive in 2019 compared to 2018. The growers price was lower than the 2015-2017 average and continued to fall until mid-April when the situation changed. Despite the positive price increase from May, the 2019 growers index was still below both 2015-2017 averages and the 2018 average during the same time period. The steady and higher production of many of the fruit and tree nut crops was blamed for the fall in growers price (Fig. 1).

Satsuma citrus production is increasing in the state of Georgia. A recent unpolished report depicts that more than 600 acres of satsuma citrus are now planted in South Georgia. Furthermore, the interest in satsuma production has prompted the creation of the Georgia Citrus Association. The drastic fall in growers price index will be a blow to the newly created Georgia Citrus Industry. This depressing growers price would have a negative impact on the overall satsuma industry performance in terms of profit margin, especially considering that recent University of Georgia economic studies depicted that satsuma citrus was an industry worthy of investment, all things being equal. All the commercial citrus fruits sustained serious price depression in 2019 compared to the same time in 2018, for instance, lemons (-27.6 %); all oranges (-32.1%); and fresh oranges (-37.1%).

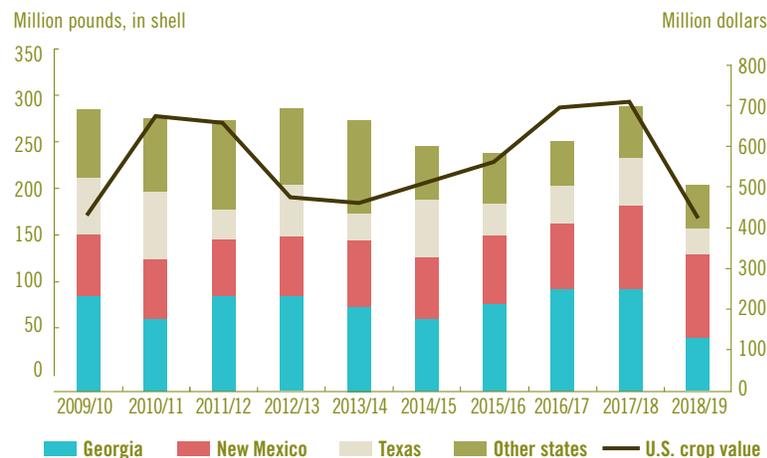
The only non-citrus fruit that sustained serious fall in prices was fresh pear (-34.8%). Despite the

Fig. 1: Fruit and Tree Nuts Growers Price Index, 2018-2019



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

Fig 2: Impact of Hurricane Michael on U.S. Pecan Production and Crop Value, 2018-19



Source: USDA, NASS, Pecan Production, FTS-368, March 29, 2019

fall in growers price, strawberry was one of the fruits that enjoyed the highest price increase experienced since the late 1990s at 31.4%.

USDA reports show that production of most tree nut crops was high in 2019 compared with 2018. The increase was exacerbated by import supplies and beginning stock, thus decreasing prices. As a result, fruit and tree nuts also experienced a lower consumer price index in 2019, during the same time period as in 2018, but higher than the average from 2015-2017. Furthermore and according to the U.S. Bureau of Labor Statistics (BLS), higher prices were recorded for grapefruit, lemons and strawberries in 2019 compared to 2018.

Pecan production decreased to 221 million pounds for the 2018-2019 season compared with 278.9 million pounds in 2018 (in-shell basis). This was the lowest since 2007. Increase in import supplies, high beginning stock and low export were blamed for lowering pecan growers price and, subsequently, total crop value. Due to Hurricane Michael, the state of Georgia sustained a 48% decrease in pecan production, as only 56.1 million pounds was reported. As a result, Georgia lost its No. 1 ranking status to New Mexico in the 2018-2019 crop season.

Production in Texas and other producing states were also low even though they did not experience damage from Hurricane Michael. Despite the significant decrease in crop production, average pecan prices decreased

Takeaways

- *If production of other fruit and tree nuts remains strong, it will still dampen the growers price index, but not as much as in 2019.*
- *Georgia pecan production will still be low compared to pre-Hurricane Michael era, but will be slightly higher than the post-Hurricane 2018-2019 crop season, as recovery from Hurricane Michael is still in progress.*
- *Pecan trade war will continue to suppress exports to China, Vietnam, the Netherlands, the United Kingdom and Hong Kong. The earlier the trade conflict between China and the U.S. is resolved, the better for the U.S. pecan industry.*

from \$2.33/lb. in 2017-2018 to \$1.75/lb. in 2018-2019. Trade theorists believe it is due to the impact of the trade war that significantly increased pecan tariffs from 7% to 47%, which eventually reduced total export of U.S. pecans to China, Vietnam, the Netherlands, the United Kingdom and Hong Kong, respectively.

When the pecan tariff was 7%, the cost, insurance and freight (CIF) cost to China port was \$3.20 + \$0.22 (tariff) = \$3.42 paid by Chinese importers. With the newly imposed 47% tariff, this total cost has increased from \$3.42 to \$4.70. ■

Vegetables and Pulses

Esendugue Greg Fonsah, Professor, REI Coordinator and Agribusiness Extension Economist, Fruits, Vegetables and Pecans, Department of Agricultural and Applied Economics, University of Georgia

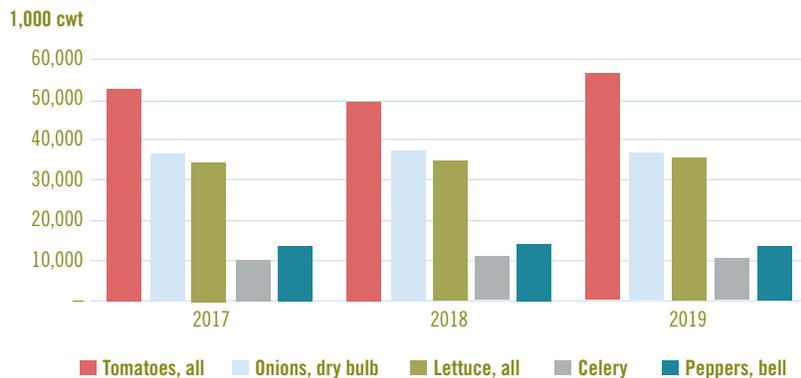
Nationally, the United States vegetable and pulse harvested area has been fluctuating. In 2016, 2017 and 2018 it was 7.9, 8.0 and 7.3 million acres respectively. There was an 8.6% decrease in 2018 harvested area compared to 2017. The forecasted 2019 harvested area was 7.1 million acres, a decrease of 3.4% compared to 2018.

Fresh vegetable production has been decreasing since 2016, when 0.4 billion pounds was reported. Although 2018 showed a 9.6% decrease from 2017 and 10.3% decrease from 2016, the forecasted 2019 report shows a decrease of 3.8% compared to 2016 and a 7.2% increase from 2018. In 2018, 0.36 billion pounds were produced compared to 0.39 billion pounds forecasted for 2019. Total vegetable and pulse production in 2018 was 1.2% lower than 2017 and will be 0.3% lower than the 1.23 billion pounds forecasted for 2019.

A report from the U.S. Department of Agriculture Economic Research Service (USDA/ERS) shows that tomatoes, dry onion, lettuce, celery and pepper were the major vegetables shipped in 2019. Tomato shipment in 2019 was higher than 2018 and 2017. Dry bulb onion and lettuce shipment were more or less consistent for the three years, whereas pepper experienced a slight decrease in 2019 compared to the past two years (Fig 1).

The total crop value of \$21.0 billion was reported in 2017, hence an increase of 4.2% from 2016. A decrease of 10.2% was reported in 2018 compared to 2017. A forecasted \$19.5 billion

Fig. 1: Production and shipment of selected vegetables, 2017-2019



Source: USDA, Economic Research Service using data from Agricultural Marketing Service.

crop value in 2019 reflects a 3.3% increase compared to 2018. On the other hand, the forecasted \$15.41 unit price of vegetable and pulses shows an increase of 3.6% in 2019 compared to 2018 and a 5.9% decrease from 2016.

The USDA/ERS report forecasted \$14.1 billion total vegetable and pulse import in 2019 compared to \$13.9 billion in 2018, which reflects a 1.5% increase. There was a 6.2% increase in total vegetable and pulse import in 2018 compared to 2017. On the other hand, although there was a 4.7% decrease in export in 2018 compared to 2017, a 6.2% increase was forecasted in 2019 compared to 2018. Overall, vegetable and pulse export was \$6.9 billion while import was \$14.1 billion, with a negative balance of \$7.2 billion in 2019.

The highest per capita consumption of vegetables and pulses was at its peak in 2017 at 402.7 pounds. In 2018, there was a 1.8% decrease compared with 2017, and forecasted 0.51% increase in 2019 compared to 2018. This continuous decreasing trend in per capita consumption shows that Americans are eating less vegetables.

Amongst the fresh-market vegetables in 2019, increased shipment of 24% was observed for lettuce, 31% for round field tomatoes, 24% for small tomatoes and 9% for squash compared to 2018. On the other hand, sweet corn shipment decreased by 18%, snap beans by 3%, bell pepper by 4% and cauliflower by 5% in 2019 compared with 2018 (Table 1). ■

Takeaways

- *Vegetable production will stay strong in the 2020 crop year.*
- *Consumer prices will be sluggish and fluctuating.*
- *Growers price index will be significantly depressed.*

Table 1: U.S. Fresh Market Shipment of Selected Vegetables, 2017-2019.

Commodity	2017		2018		2019		Percent Change previous ²
	Aug YTD	Annual	Aug YTD	Annual	Aug YTD	Annual	
----- 1,000 cwt -----							
Asparagus	3,834	5,184	4,261	5,724	3,489	---	-18
Snap beans	2,663	3,775	2,553	3,652	2,484	---	-3
Broccoli	7,497	11,330	8,065	11,816	8,284	---	3
Cabbage	6,561	9,870	6,628	10,091	6,532	---	-1
Chinese Cabbage	631	892	837	1,146	860	---	3
Carrots	8,402	12,581	9,402	14,623	9,919	---	6
Cauliflower	3,607	5,528	4,390	6,474	4,153	---	-5
Celery	10,481	16,199	10,920	17,159	10,838	---	-1
Sweet corn	11,033	12,835	10,552	11,979	8,646	---	-18
Cucumbers	14,610	21,829	15,138	22,045	15,210	---	0
Greens	1,707	2,854	1,737	2,595	1,694	---	-2
Head lettuce	17,570	25,798	18,559	27,508	18,945	---	2
Lettuce, romaine	15,451	22,987	15,349	22,523	15,484	---	1
Lettuce, others	1,536	2,220	1,195	1,890	1,481	---	24
Onions, dry bulb	36,480	54,252	36,995	56,289	36,616	---	-1
Onions, green	2,665	3,988	2,724	3,875	2,671	---	-2
Peppers, bell	13,511	19,946	13,952	19,891	13,343	---	-4
Peppers, chile	6,449	11,399	7,317	12,257	7,544	---	3
Squash	7,275	11,624	7,714	11,805	8,412	---	9
Tomato, field, round	24,767	34,902	22,571	33,030	29,590	---	31
Tomato, field, Roma	6,079	8,020	6,383	8,676	6,587	---	3
Tomato, ghouse ³	19,585	28,452	18,796	26,703	18,454	---	-2
Tomato, small ⁴	2,150	2,677	1,647	2,305	1,879	---	14
Selected total	224,543	329,142	227,684	334,056	233,112	---	2

Note: YTD = year to date. ¹1,000 cwt = 100,000 lbs. Data for 2019 are preliminary and include domestic and partial imports.

²Change from YTD August 2018. ³All tomatoes produced under cover. ⁴Grape and cherry tomatoes.

Source: USDA, Agricultural Marketing Service, *Fruit and Vegetable Market News*.

Corn, Wheat and Soybeans

*Adam N. Rabinowitz, Assistant Professor and Extension Economist
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International trade issues dominated news for corn, soybeans and wheat in 2019, as trade negotiations continued between the U.S. and numerous trading partners throughout the world. Further challenges to corn and soybean markets in the U.S. also resulted from flooding and delayed planting in the spring, followed by an interrupted harvest in the fall. This has created a very turbulent market for these crops in 2019 and, while some positive movement has occurred on the trade front, there is still a great deal of uncertainty as Georgia growers continue to be positioned largely within the constraints of the national market.

CORN

Planted acres of corn in Georgia increased 20% in 2019 to 390,000 acres, the largest number of acres since 2016. The average yield in Georgia is projected by the U.S. Department of Agriculture (USDA) at 168 bushels per acre, 4.6% lower than 2018, largely due to some periods of very dry weather. Even with lower yields the increase in planted acres is projected to result in a 15.6% increase in production from 2018 to 58 million bushels.

Meanwhile, total U.S. corn production is forecast down 5.3% on projected yields of 167 bushels per acre, also a 5.3% decline from 2018. However, significant delays in harvesting in parts of the northern plain states and the Corn Belt create greater uncertainty in these projections and could result in lower production numbers. Ending stocks are expected to fall

to a four-year low, although they will remain higher than the 10-year average.

Corn prices in Georgia have been slowly increasing since the recent marketing year average (MYA) low of \$3.88 per bushel for the 2016-2017 marketing year. Georgia growers generally see a positive basis for corn and this was seen again during the 2018-2019 MYA, when the price was \$4.35 in Georgia versus \$3.61 nationally. Based on futures prices and a positive basis for 2020, expected corn prices in Georgia should be in the range of \$4.48 to \$4.52 per bushel. This increase comes as U.S. supply tightens due to harvest delays, although there is significant export competition from Brazil and Ukraine that has presented some marketing challenges for the U.S.

SOYBEANS

Planted soybean acres in Georgia declined for the fourth straight year to 100,000 acres, the lowest level since 1959. Yields are also projected to continue the downward trend at 26 bushels per acre, the lowest level since 2011. Total production of 2.5 million bushels is a 52% drop from 2018 and the lowest level since 1983.

U.S. planted acres in 2019 were down to 76.5 million acres, the lowest level since 2011. This was driven largely by trade disputes with China that have resulted in a large buildup of soybean stocks in the U.S. and significantly reduced prices. Yields are also forecast lower across the U.S. for 2019, at 46.9 bushels per acre. At this

level, the U.S. soybean crop will be 3.5 billion bushels, a 20% decline from the previous year. With the significantly reduced production, U.S. ending stocks are expected to decrease to 475 million bushels at the end of the 2019-2020 marketing year, down from 913 million bushels a year prior. These ending stocks would still be more than two times the average ending stock from 2007 to 2016.

The MYA price of soybeans in Georgia was \$7.90 per bushel in 2018-2019, the lowest price since 2006. Prices have already started to rebound from those levels, as that was during the peak of the trade dispute with China. For 2020, Georgia prices are expected to be around \$8.83, including a negative basis. There is a great deal of uncertainty with this price forecast, however, due to the ongoing trade dispute with China and the increase in competition from Brazil.

WHEAT

Georgia planted acres of wheat continue the overall downward trend, with 150,000 planted acres in 2019, representing the smallest planted acreage since 2010. Also continuing the downward trend is the limited harvest of these planted acres, as only 50,000 acres of wheat were gathered at the end of the production year. This is the smallest number of wheat acres harvested since 1982. Meanwhile, yields continue to increase at 56 bushels per acre, significantly higher than the 10-year average. As a result of the decreased acreage,

total production for 2019 is down 26% to 2.8 million bushels.

In the U.S., soft red winter wheat production also decreased by 16.2% to 239 million bushels, representing 12.5% of the total U.S. wheat production. Meanwhile, total wheat acreage was down to just over 45 million acres. With yields increasing to 51.7 bushels per acre, production of all wheat increased 1.9% to 1.9 billion bushels. The positive news for wheat is that exports are projected to increase during the 2019-2020 marketing year, including benefits from a U.S. trade agreement with Japan and, assuming no new trade disputes surface, a recently announced duty-free tariff rate quota with Brazil. Thus, ending stocks are forecast to decrease below 1 billion bushels for the first time in four years and could go somewhat lower, although they will still be at least 50% higher than the pre-2015 21st-century average.

Wheat prices in Georgia have rebounded from their low point in 2016 to a MYA price of \$4.80 per bushel in 2018-2019. While the outlook for wheat indicates lower ending stocks, there has been little movement in the futures market to reflect any significant change in price. Georgia wheat producers face a negative basis and prices in 2020 are expected to fluctuate around \$4.82. ■

Takeaways

- *More corn, less soybeans and less wheat is the acreage trend in Georgia, which should continue in 2020.*
- *The most significant increase in prices should be in the corn market, although export competition could dampen that upward movement.*
- *Resolution of trade disputes are expected to produce opportunities for all three commodities, however marketing opportunities are not expected to rebound to pre-trade dispute levels as increased global competition has occurred.*

Beef Cattle

Tommie Shepherd, Public Service Associate, Center for Agribusiness and Economic Development, University of Georgia

Two important factors affecting livestock markets in 2020 will be the cost and availability of high-quality feed and forage and the uncertainty surrounding developments in international trade policy. Heavy rains and flooding delayed or postponed feed and forage plantings across large areas of the Midwest in 2019, setting the stage for tight supplies, higher prices, and reduced quality of feed and forage going to the livestock industry in 2020. At the same time, retaliatory tariffs on U.S. agricultural exports to China remain in place even though similar tariff issues have been resolved with other major trading partners, including Canada and Mexico. Other countries have picked up some of the excess supply created by China's tariffs on U.S. agricultural exports, so that export demand appears to be relatively stable across most major areas of livestock production, including beef.

A combination of high feed prices and drought conditions between 2007 and 2014 resulted in significant downsizing of the beef industry, with cattle numbers reaching an all-time low. Both commercial beef production and consumer demand for beef have made a strong showing since the beginning of the current herd expansion in 2015. Strong U.S. per-capita beef consumption, coupled with international demand for U.S. beef exports, and a decline in cold storage stocks should provide support for stable to modestly higher cattle prices in 2020. U.S. per-capita beef consumption began

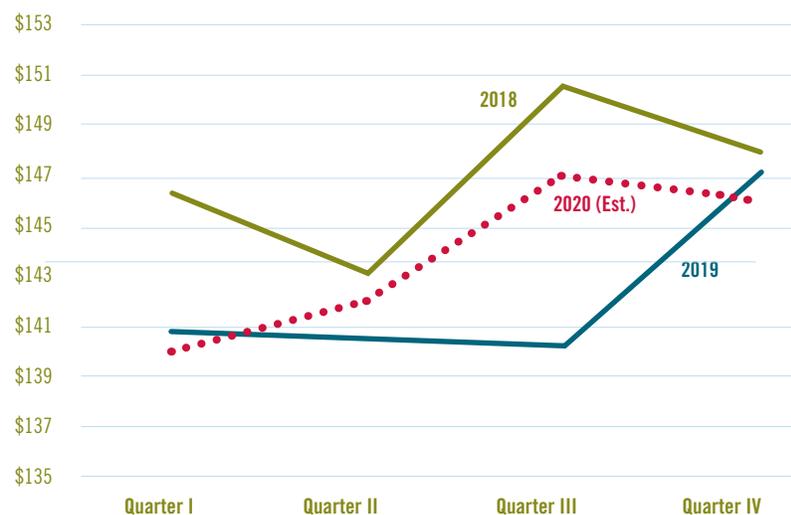
Average Livestock Prices 2000-2019 (\$/cwt)



Commercial Beef Production 2000-2019 (Million lbs.)



Quarterly Feeder Steer Prices (Ok City: \$/cwt)



an accelerated decline around 2007 which lasted through 2015. Since that time, it has exhibited a significant uptick. It is likely that the decline was caused, at least in part, by the general economic recession in place at that time, although some of the recent recovery in per-capita consumption may be attributed to current interest in high-protein diets, as well as a stronger economy.

According to USDA Cattle on Feed reports in late 2019, the U.S. cattle on feed inventory was 1% smaller than 2018, but 4% higher than 2017, signaling a peak and a possible end to the expansion phase of the current cattle cycle. An increase in the number of female animals on feed also indicates that a slowdown in herd expansion may be on the horizon as producers scale back breeding stock in response to weakening calf prices. Since the beginning of the current herd expansion in 2015, beef production has grown at an average annual rate of 4%, compared to a long-term growth rate of about one half of one percent. Cattle prices began to recover in late 2016 and held steady until the third quarter of 2019, when a fire at Tyson Foods' Holcomb, Kansas, slaughter plant caused a temporary market disruption. Feeder cattle prices dropped immediately following the fire amid concerns that feedlots would find it difficult to market fed cattle and be reluctant to take on new placements. By year end, however, it was evident that these concerns were unfounded, with prices returning to or surpassing

Takeaways

- *The expansion phase of the current cattle cycle appears to be coming to an end and growth in beef production is beginning to slow down.*
- *Cattle prices in 2020 are projected to exhibit very little improvement over 2019 price levels although strong consumer demand for beef, both domestic and internationally, should support cattle prices through 2020.*
- *Feed and forage prices and availability may hamper producer profitability in 2020.*

pre-fire levels. In fact, strong packer margins pushed cattle prices and slaughter rates higher in November and December, opening up the possibility that slaughter rates may be lower during the first half of 2020 as a result of fewer animals available for slaughter. Consequently, beef production is expected to remain relatively flat, at around 27 million pounds in 2019, before resuming its climb in 2020. USDA forecasts production of 27.5 million pounds for 2020, a 2% increase over 2019.

Beef exports play an important role in supporting domestic cattle prices. At the international level, the U.S. faces fierce competition from Australia and New Zealand in beef export markets due to their favored nation status under the Trans-Pacific Partnership. Exports to China increased significantly during 2019, despite the country's tariffs on U.S. beef. The U.S. also made significant inroads into other Asian markets as Australia

redirected some beef exports to meet Chinese demand. Canada, historically a major market for U.S. beef, appears to be moving towards producing greater quantities of the high-quality beef that it has typically imported from the U.S.

USDA projects Choice Steer Prices (5-Area Direct) to average \$117 per hundredweight (cwt) for 2020, about the same as in the two prior years. Feeder Steer Prices (Oklahoma City) are projected to be \$143/cwt for 2020, compared with \$142/cwt for 2019 and \$147/cwt for 2018. Georgia auction prices for feeder cattle are historically \$20 to \$30 less than Oklahoma City prices based on the cost of transportation to Western feedlots for finishing. ■

Pork

Tommy Shepherd, Public Service Associate, Center for Agribusiness and Economic Development, University of Georgia

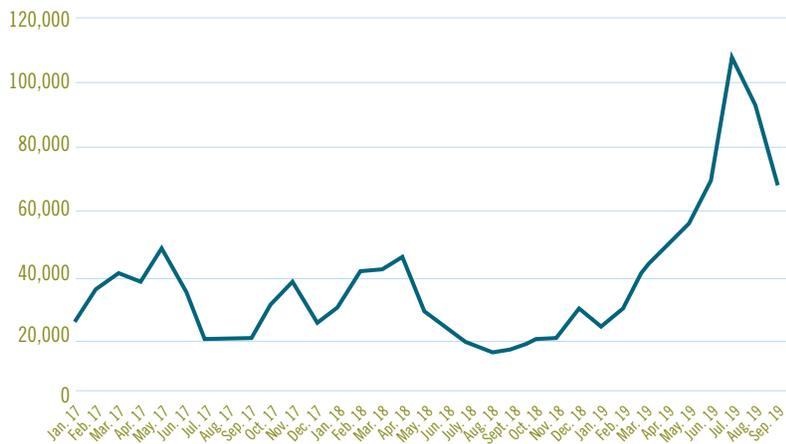
Pork production has emerged as a bright spot in the U.S. livestock industry in recent years, as demand has increased, new processing plants have been constructed, and export demand has grown by leaps and bounds in the wake of a Chinese pork industry devastated by the ongoing effects of African Swine Flu (ASF), which was first identified in August 2018. In fact, the U.S. Department of Agriculture's (USDA) Foreign Ag Service projects that worldwide pork production in 2020 will be down by around 16% from 2018 levels. China has been reported to have lost as much as 30% of its total swine herd, with the disease spreading to other Southeast Asian countries and the Philippines. The current market situation probably represents a rare opportunity for U.S. pork producers, as some industry experts predict that it may take years for China to completely recover from the ASF epidemic. Having been relatively flat since the early 1980s, per capita consumption of pork in the U.S. has also shown strength in recent years, increasing from 50.1 pounds per person annually in 2016 to an estimated 52.2 pounds in 2020. As with beef consumption, this is likely attributable to combination of a strengthening economy and recent interest in high-protein diets. In particular, the demand for bacon, as measured by commercial disappearance of pork bellies, has grown by about 4% annually for the past several years.

U.S. pork producers have been quick to respond to the current market situation. USDA's latest

Pork Production and Price



U.S. Pork Exports to China: 2017-2019 (Monthly, 1,000 lbs.)



Hogs and Pigs Summary Report noted a record 77.7 million hogs in the U.S. It also noted a sharp increase in pigs, presumably signaling producers' intentions to continue expanding production as market reports suggest higher prices and improved profitability in the coming year. During the fourth quarter of 2019, pork production was more than 6% above year earlier levels and prices were 3% higher than the fourth quarter of 2018. For the year, USDA reports that total 2019 pork production exceeded 2018 levels by 5%, with prices averaging \$48 per hundredweight (cwt); nearly 5% above 2018.

Export demand for U.S. pork was strong in 2019. USDA reports that sales of U.S. pork to China and Hong Kong tripled in late 2019, so those countries bid supplies away from traditional buyers including Mexico, Canada, Japan and South Korea. Chinese pork prices have more than doubled since the African Swine Flu epidemic began, with 2019 U.S. pork exports to the country increasing by 78% over 2018 levels. It should be noted that Chinese demand for pork is so strong at the present time that these increases occurred despite the country's retaliatory tariffs on U.S. pork exports. The apparent expansion of U.S. pork production in response to China's ASF plight is not without some degree of risk, as the Chinese continue to threaten further retaliation in response to U.S. demands concerning intellectual property rights and certainly have options other than the U.S. for

Takeaways

- *African Swine Flu has devastated pork production in China and Southeast Asia, creating a strong demand for U.S. pork exports and driving hog prices higher for the foreseeable future.*
- *U.S. pork production is expanding rapidly and is projected to grow by 5% in 2020 in response to higher prices.*
- *U.S. pork producers should see significant increases in profitability in 2020 despite higher feed prices.*

future pork purchases. It is also reasonable to expect that Chinese consumers will begin to substitute other protein sources for pork at a sufficiently high price level. For these reasons, producers may want to consider risk management strategies for protecting what appears, at the moment, to be very favorable margins. Fortunately for producers, Mexico, the U.S.'s largest pork customer, rescinded retaliatory tariffs in May, leading to a return of exports to historical levels.

Production forecasts for 2020 project another 4% to 5% increase, with prices expected to grow by an astonishing 19% to \$57/cwt. This rate of growth should spell good news for Georgia's pork producers, considering that more than half of the state's farm gate value for pork comes from raising feeder pigs, which should be in strong demand by hog finishing operations. These forecasts anticipate strong competition for hogs by several

recently constructed processing facilities, as well as significant growth in international demand. This is good news for U.S. pork producers who were plagued by depressed live hog prices during the early months of 2019. In the first quarter of 2019, live hog prices (National Base) averaged just \$41/cwt compared with an estimated farrow-to-finish cost of about \$50/cwt. USDA's projected \$57/cwt for 2020 should translate into significantly improved producer profitability. In 2018, the last year for which Georgia Farm Gate Value Report data is currently available, Georgia farrow-to-finish operations reported receiving an average of \$55.40/cwt compared with a national average of \$45.93/cwt, implying an approximate \$9.47 location differential for Georgia producers. Producers are, however, likely to face somewhat higher feed costs in the coming year as corn prices rise going into 2020. ■

Poultry and Eggs

Todd E. Southerland, Senior Vice President, Food and Agribusiness Industry Manager, SunTrust Bank

OVERVIEW

2019 was a challenging year for the broiler industry due to excess protein supplies being left to clear the domestic market, which generally resulted in lower pricing for most poultry parts. Despite some degree of resolution now being within sight, the trade situation with China has created tremendous uncertainty for most of the agricultural sector, and the general softness in international markets has resulted in lower commodity prices for a variety of goods. On a positive note, we know that incremental demand exists and that if a return to normalcy in trade markets is achieved, it can have an almost immediate impact on the resulting equilibriums in several ag-related markets, including U.S. poultry. The best example of this is the pork sector, where the continuing decimation of the Chinese hog industry due to African Swine Flu would welcome the relief that U.S. exporters can provide. Similarly, with China lifting its four-year ban on U.S. poultry due to prior cases of highly pathogenic avian influenza, renewed shipments to Asia could remove excess supplies from the market and result in improved pricing for 2020.

POULTRY OUTLOOK

Production: The 2020 broiler production forecast has been increased on recent slaughter and placement data (see Figure 1), and recent trends support the forward view as monthly production levels have trended well ahead of the prior year.

Figure 1. Historical Chicken Placement

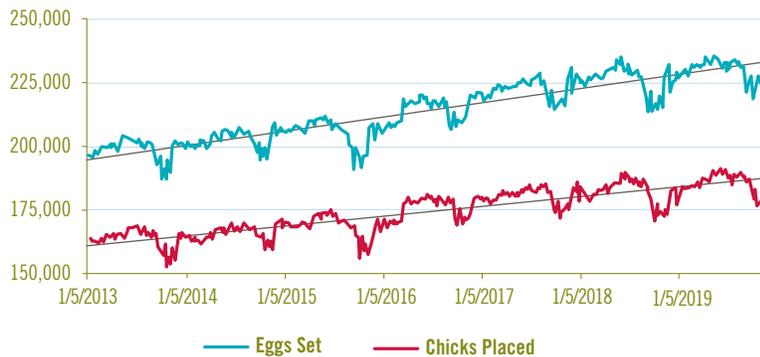


Figure 2. Wholesale Boneless Chicken Breast Prices



Increases have been driven by both headcounts and slaughter weights, although it's interesting to note this continuing fundamental shift in the market: the increase in average bird weights hasn't been driven by heavier birds themselves, but instead by larger headcounts in the heavier-weight production category. This reflects a desire among many processors to maximize deboned meat yields to lower costs, which has been beneficial over the last year as broiler prices have generally been soft (see Figure 2). The current production forecast for 2020 is

44.54 billion pounds, which would be 1.8% higher than the estimate for 2019.

Price: Processors experienced depressed pricing for much of 2019, particularly as compared to the last few years, and the export market has been the biggest impediment to profitability. The trade situation with China has been a challenge, though not nearly as significant for broiler companies as for the pork sector. With borders slowly beginning to open that would allow for more duty-free pork exports to Asia, I would expect the domestic pork market

to clear a significant amount of meat in the first half of 2020. This would benefit competing proteins as price-conscious consumers have shown a preference for chicken when relative prices are appropriately balanced, and the renewed demand from Asia should certainly result in rising pork prices for 2020. Broiler exports as a percentage of domestic production (see Figure 3) have been trending into the mid-teens, which is meaningfully lower than the average of 20% from earlier in the decade. A return to these historical highs would be highly supportive to prices, as there would be significantly less excess meat left to clear the domestic market.

EGG OUTLOOK

September table egg output is estimated at 670 million dozen, an increase of 1.7% from the prior year. Increased production has been driven by higher lay rates and a slight increase in the domestic

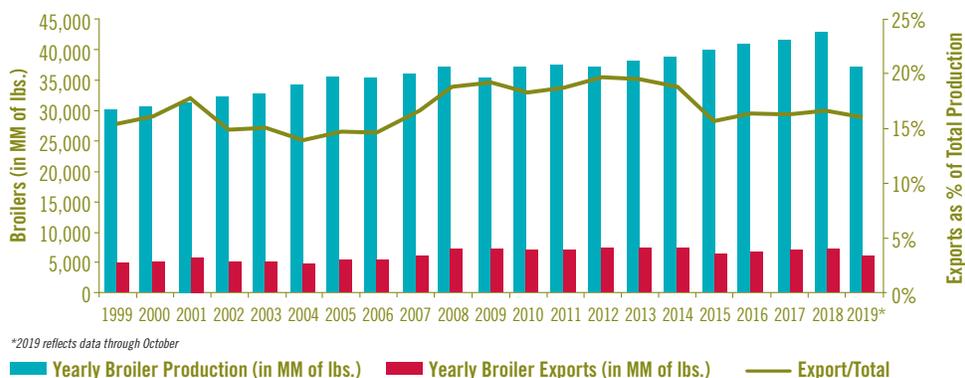
layer flock to approximately 333.5 million layer hens. We would expect 2020 egg production to increase modestly, as the efficiencies and flock expansion noted above is likely to be partially offset by less productive birds being retained beyond typical

service periods. In typical seasonal fashion, egg prices have generally improved over the last few months as reflected by a fourth quarter wholesale price forecast of 110 cents/dozen, well ahead of the October average of just 78.8 cents/dozen. ■

Takeaways

- Continuing increases in egg sets and chick placements point to higher broiler production in 2020. (Figure 1)
- Broiler pricing was mixed for most of the year, but profitability was challenged due to lower boneless breast pricing and the lack of a seasonal summer rally to prior year levels. (Figure 2)
- Export markets are a key to broiler market conditions in the year ahead as the downward trend in trade volumes has resulted in more commodity meat left to clear the domestic market, which was a significant contributor to the lower price environment experienced in 2019. (Figure 3)

Figure 3. U.S. Broiler Production vs. Exports



Sources

Livestock, Dairy, and Poultry Outlook, LDP-M-305, U.S. Department of Agriculture, Economic Research Service, November 15, 2019

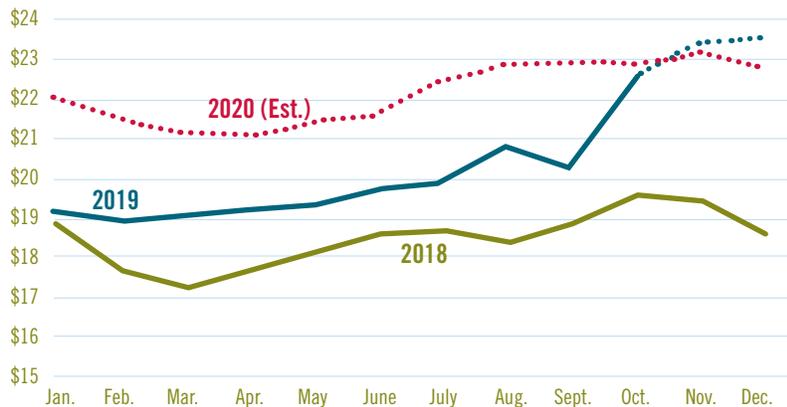
"U.S. Poultry Outlook: This Time Things Are Different." *CoBank*, 2019, www.cobank.com/knowledge-exchange/animal-protein/us-poultry-outlook-this-time-things-are-different. Accessed 10 Dec. 2019.

Dairy

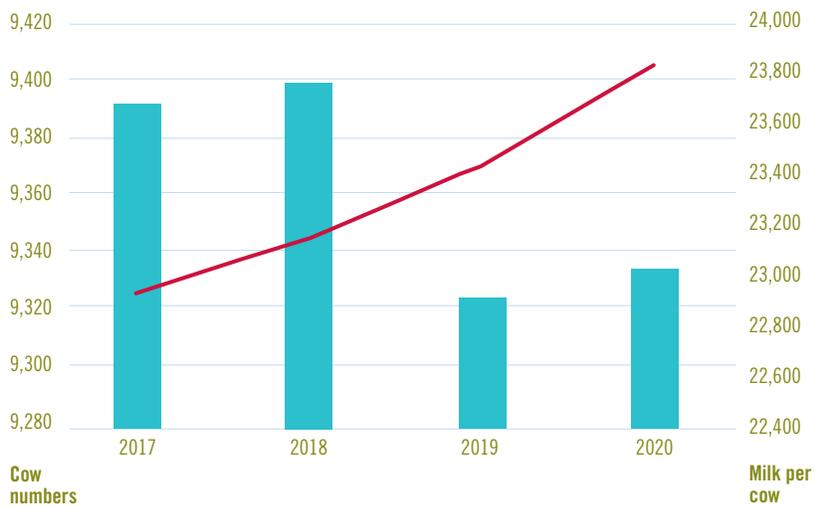
Tommy Shepherd, Public Service Associate, Center for Agribusiness and Economic Development, University of Georgia

After several years of stagnant farm-level milk prices, market conditions in the dairy industry appear to suggest a modest recovery for 2020. Over the past few years, a combination of strong U.S. milk production coupled with slow growth in domestic demand for milk and dairy products, and a loss of several major export markets, has placed downward pressure on farm milk prices. The result has been a significant loss of dairy farms and milk cows across the southeastern U.S. Georgia has emerged as the lone exception to this trend, maintaining cow numbers and farm production capacity despite the loss of a number of dairy farms. Georgia has experienced some loss of milk processing capacity as major retailers continue the trend of bottling more fluid milk outside the state and transporting it to Georgia in packaged form. A new element of uncertainty was introduced into dairy markets in November 2019 when Dean Foods, the nation's largest milk processor and distributor, filed for bankruptcy and announced that it was looking for potential buyers. Dean Foods owns and operates a number of milk processing plants that receive milk from Southeastern dairy farmers and it is likely that any Chapter 11 reorganization or sale will include decisions regarding the future of these plants. Georgia dairy farmers began to experience fallout from Dean's deteriorating financial situation more than a year ago when Dean's Braselton, Georgia, processing plant closed. Hopefully, further impacts on

Georgia Mailbox Milk Prices (Est. \$cwt)



Milk Cows and Milk Per Cow



Georgia producers will be limited.

The result of prolonged depressed milk prices is that cow numbers at the national level declined during 2018 and the first half of 2019, even though milk-per-cow productivity continued to grow at its historical rate of around 1.5% per year. Per-cow productivity strengthened during

the latter months of 2019 based on the expectation of improving milk prices and culling of underperforming animals, with per-cow productivity overriding decreasing cow numbers to the point that USDA projects 2019 milk production will surpass 2018 by a billion pounds, or about one half of one percent. Excessive short

term expansion of the nation's milk supply is likely to be limited by the reduced farm equity that has resulted from enduring several years of low milk prices and the prospect of rebuilding milking herds with a limited supply of replacement heifers. Nonetheless, USDA projects milk production growth of 3.8 billion pounds (1.7%) in 2020. This would represent a return to the average long-term growth trend for the industry.

Cheese prices have long been a major driver of U.S. milk prices. During 2019, cheese stocks declined substantially from 2018 levels as a result of strong domestic and international demand coupled with limited milk production. Prospects for limited milk production growth again in 2020 should help to support dairy commodity prices for another year.

At the international level, the trade policy-related loss of export markets in China and Russia has been partially offset by strong sales to other countries in Southeast Asia, drawing down stocks of U.S. manufactured dairy products. There is considerable speculation that Chinese demand for U.S. dairy protein concentrates may override tariff issues as China seeks to rebuild a swine herd devastated by African Swine Flu. Milk Protein Concentrates (MPCs) are regarded as an excellent protein source for piglets. This tightening of supply in the face of relatively stable demand, both domestically and internationally, together with modest production growth, is projected to increase the U.S. All Milk Price by about

Takeaways

- *Dairy cow numbers declined throughout 2018 and 2019 in response to several years of depressed farm-level milk prices.*
- *Lower dairy cow numbers and reduced availability of replacement heifers should slow milk production and support modestly higher prices in 2020.*
- *Strong dairy exports will continue to support domestic milk prices despite Chinese tariffs.*

80 cents per hundred pounds of milk (cwt), from \$18.60/cwt in 2019 to \$19.40/cwt in 2020 (December 2019 USDA Livestock, Dairy, and Poultry Outlook). These stronger prices should prevail throughout 2020, as a reduced supply of replacement dairy cows and weather-related feed/forage issues will impede a rapid recovery of milk production in response to higher prices. At the same time, major dairy export competitors including the European Union, Australia and New Zealand face reduced prospects for expansion due to environmental issues and drought conditions.

Georgia ranks second in terms of milk production in the southeast, behind Florida, and 23rd in the nation. It is home to approximately 84,000 dairy cows that collectively produce about 1.8 billion pounds of milk each year. Farm-level milk prices in Georgia fluctuate in step with U.S. prices through a series of milk pricing formulas administered by the USDA. Georgia dairy farmers have historically received a farm-level milk price that is, on average, about \$3 per hundredweight higher than the U.S. All Milk Price. This price difference reflects the additional value that is typically placed on milk produced in the milk-deficit regions of the Deep South. The implication is that, based on USDA's current 2020 forecasts, Georgia dairy farmers could realistically expect to see average farm-level milk prices in the range of \$22 to \$23/cwt in 2020. ■

Honey Bees

Jennifer Berry, Agricultural Research Professional and Lab Manager, UGA Honey Bee Program

Overall, 2019 proved to be a slightly better year for our Georgia beekeepers, which was a welcomed change. Honey production across the board was average, with colony loss, although still high, less than was reported in previous years. Here's the 2019 annual breakdown of Georgia honey crops.

Gallberry, still considered one of Georgia's most abundant honey crops, is a good honey for packing due to its light color, slow rate of crystallization and pleasant flavor. Located primarily in the flatlands of Eastern Georgia, gallberry has been a favorite among consumers. However, in 2019, gallberry yields were slightly lower than in 2018, and pure gallberry honey was rare to find. Due to gallberry blooming earlier than normal, other floral options were still available, allowing the nectars to be mixed. Another issue contributing to the decrease in gallberry honey overall, is habitat loss in areas where gallberry thrives. Barrel prices for 2019 ranged from \$2.10 to \$2.15 per pound, which was about the same as 2018.

Wildflower nectar flows in north Georgia were above average, with warm temperatures and minimal rainfall during the bloom contributing to the extra yield. This was not the case in south Georgia, which experienced below average yields due to rainy conditions moving in during the bloom. Honey prices for spring wildflower remained the same as gallberry. Predictions for both gallberry and wildflower for 2020 remain optimistic.

Cotton honey from mid to southern regions of Georgia had

average yields, but much of the honey harvested was considered too "thin." Moisture content in honey should be in the 17 to 18% range so it won't spoil/ferment or crystalize. Cotton honey this year had a higher moisture content, ranging above 19% in some cases, and had to be dried before it could be bottled. Because of this, cotton honey is considered a bakers grade, and is not sold as table honey. The price of cotton honey averaged around \$1.85 per pound.

Yields of tupelo honey were extremely poor for 2019. Rain and cooler temperatures at the wrong time contributed to the lower yields. Wholesale prices for tupelo honey jumped to \$7.50 per pound due to decreased supply. These high prices per pound decreased demand for tupelo honey from consumers, which wasn't good for producers.

Sourwood flows continued to be unpredictable depending on the region. Some areas experienced better than average yields while other locations saw little to none. This seems to be the norm for sourwood. One year the flow will be exceptional and then the next year nonexistent. In areas that saw little to no sourwood, rain moved in for days right as the blooms opened, keeping the bees in the hives and the nectar unavailable. Price for sourwood in a drum was \$6.00 per pound and retail averaging around \$10 per pound.

Reports of colony failure were the same as last year, with commercial operations experiencing a 20 to 30% loss. Some backyard beekeepers continue to show extreme losses,

some as high as 80%. The number one reason colonies die is due to an ectoparasitic mite, Varroa destructor. This is not only an issue in Georgia but worldwide. If mite populations are not maintained below the economic threshold, colonies will perish. Many backyard beekeepers either don't have the knowledge or the expertise to deal with such a formidable pest. Even some commercial beekeepers, who have been keeping bees for decades, have difficulty dealing with this parasite. These mites feed on the fatty bodies of the honey bees (adults and brood), thereby decreasing their ability to ward off pathogens such as Deformed Wing Virus (DWV). If mite populations are not controlled, colonies will eventually perish. Even with several nationally approved miticides for use in hives, mites are still the number one killer of colonies throughout the US.

Another reason colonies die is starvation. Lack of honey stores in most colonies across the state is due to poor weather conditions during the nectar flow, and/or too much honey being taken for extraction. In some regions of the state that experienced low nectar yields, colonies will be light on honey stores. Warmer than average temperatures also kept bees flying on days they should have been in the hive, hence more honey was consumed. If beekeepers have not been feeding or plan not to feed, colonies will surely starve. Pure cane sugar is recommended as a food source and can be fed to colonies in a 1:1 sugar solution. ■

Takeaways

- *There are five major sources of honey produced in Georgia: sourwood, tupelo, gallberry, wildflower and cotton. Honey production overall was average in 2019 for the state, with each source fluctuating slightly above or below average, depending on location.*
- *Colony losses for commercial operations remains at 20 to 30%, with backyard beekeepers, in some cases, experiencing losses above 80%.*
- *Varroa destructor (parasitic mites) and starvation remain the leading cause of colony loss in Georgia and nationally.*

Timber

*Tyler Reeves and Bob Izlar, Harley Langdale Jr. Center for Forest Business, Warnell School of Forestry and Natural Resources, University of Georgia
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The U.S. economic outlook may decline gradually as we move into 2020. Increasing international trade disputes with China have led to heightened concerns over U.S. wood markets. However, these concerns are partially alleviated by lumber capacity increases in the Southern U.S., as well as a steady housing market. Year to date, the domestic economy slowed slightly when compared to 2018. In the future, this slowdown is expected to continue with projections for U.S. Gross Domestic Product (GDP) growth set at 2.2% for 2019 and 1.7% for 2020.¹ Looser restrictions on monetary policy by the Federal Reserve are expected to buffer the magnitude of the slowdown.

Housing remains a bright spot in the current market situation. Domestically, housing starts are expected to reach 1.25 million by year's end, a 0.2% increase from 2018. This trend is expected to continue with housing starts forecasted to be 1.28 million in 2020.² While housing starts are below historical levels of 1.5 million, steady increases year-over-year demonstrate encouraging signs for lumber demand. Housing starts are constrained by labor shortages in the construction and transportation sectors as a result of near record-low unemployment levels. Despite this, the housing sector looks to continue its positive trend from 2018.

Figure 1. U.S. South Softwood Lumber Capacity⁸

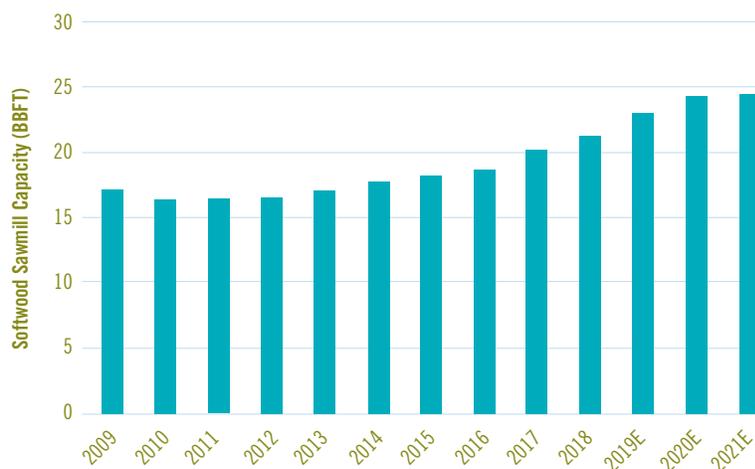
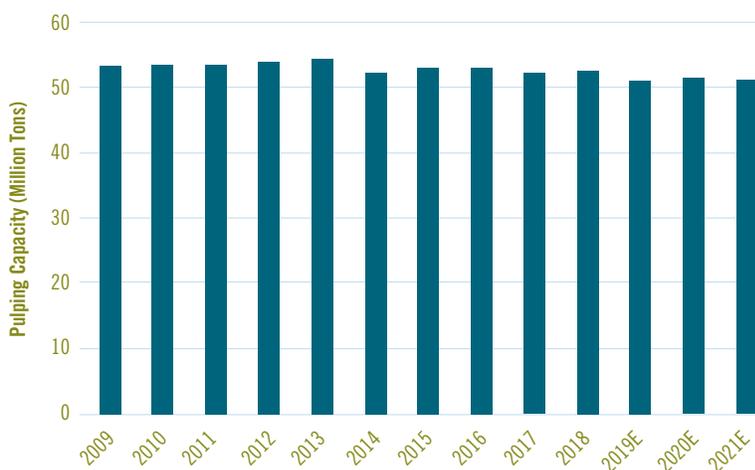


Figure 1. U.S. South Softwood Pulpwood Capacity⁸



¹ Historically, "pulpwood" is a common name for small-sized logs that have been used primarily in pulp production, but more recently have also been used for OSB and bioenergy production, particularly wood pellets.

COMMODITY PRICES

Commodity prices reached exceedingly high levels in 2018 but have since moderated considerably. The Random Lengths Composite Price closed Q3 2019 at a price of \$356 per thousand board feet (mbf). This represents a 19% annual decrease from the end of Q3 2018. At their peak, lumber prices reached \$582/mbf in June 2018. After this peak, lumber prices declined significantly until the end of the year and began to stabilize. Prices have since remained relatively steady around the \$350 level for the majority of 2019.³ Hot and dry weather conditions in the South increased accessibility, boosting supply. This, along with increased efficiency at lumber mills, has contributed to low price levels.³

Pulp prices have dropped significantly from highs in 2018. Northern bleached softwood kraft closed the third quarter 2019 at \$866 per ton, a 30% year-over-year decrease from 2018. Bleached hardwood kraft closed at \$764 per ton, a 27% year-over-year decrease. Lastly, old corrugated container (OCC) prices dropped \$55 from September 2018, a 63% year-over-year decrease. Paper and paperboard production have dropped 5% compared to the same levels from last year. Decreasing prices and high overhead costs have contributed to several pulp mill shutdowns in the South. Additionally, Hurricane Dorian caused several precautionary shutdowns, but did not result in significant damage.³

As of the third quarter 2019,

Takeaways

- *Lumber prices have declined significantly from 2018 and are holding steady at \$350/mbf.*
- *Pulp prices have decreased across the board in the South, leading to several pulp mill closures.*
- *Average Southern Pine Sawtimber and Pulpwood prices continue to remain flat.*

TimberMart-South reported an average Southern Pine sawtimber price of \$23.64 per ton. This signifies a year-over-year decrease of \$0.17 per ton in stumpage price for average pine sawtimber across the South. Pine Pulpwood⁴ reported an average South-wide stumpage price of \$8.67, a minor \$0.07 decrease from \$8.74 in Q3 of 2018.⁴ Pine sawtimber prices have declined in the South in the third quarter in 12 of the last 15 years in line with seasonal, summer trends.³ Prices are not forecasted to increase due to a large supply of pine sawtimber inventory in the South. Sawtimber inventories are predicted to peak in 2025 and begin decreasing thereafter.⁵ While region-wide prices remain flat, stumpage prices vary significantly by submarket. For up to date prices, check with your local forestry consultant or TimberMart-South.

U.S. SOUTH CAPACITY CHANGES

With relatively low overall pine sawtimber prices, an established forest industry, and issues with wood availability in Canada,

there has been a large influx of Canadian sawmills into the U.S. South. Currently, Canadian lumber producers constitute more than a third of the South's total lumber capacity.⁶ This has led to an increase in overall softwood lumber capacity. Southern lumber capacity currently sits around 23 billion board feet and is forecasted to grow to nearly 25 billion board feet by 2020. However, additional increases in production are necessary to account for this additional capacity.⁷ With housing starts staying relatively steady and GDP beginning to decline, capacity is also expected to stabilize in the South. Forecasts of new sawmill expansions or greenfield projects are expected to be less frequent as we finish the year and move into 2020.⁷

Southern pulpwood capacity has declined slightly in 2018 and is expected to remain steady for the next several years. Decreases in production of containerboard and reduced consumption of pulp

continued on next page

Timber, *continued*

products by China in the ongoing trade war have driven production down. Despite the decreased production, several companies have announced increased investment and conversions to expand capacity.⁹ Steady demand from e-commerce containerboard and packing materials has helped offset losses in newsprint. The effects of increased investment are expected to be concentrated to local wood markets with little overall effects on average region-wide pulpwood price. ■

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Green Industry

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The green industry — the production, distribution, retailing and services associated with ornamental plants; landscape and garden supplies; and nursery, greenhouse and sod growers — is highly dependent on the overall and local economies. Firms surviving the recession starting around 2008 have experienced increased demand for their products and services. In 2018, Georgia green industry market demand and sales were good for many green industry firms, but demand and sales were stagnant for some firms located in areas still experiencing recessionary effects. Weather, for the most part, was good during the winter, spring and summer, with above-average temperatures during each season and average to above-average rainfall levels across the state. The above-average temperatures can allow for an earlier start for the planting of plants and turf, while higher temperatures can allow for a longer season.

Economic indicators provide an idea of what 2020 will bring, however there are mixed signals in the marketplace. Housing starts are a fairly good indicator of green industry growth. According to Federal Reserve economic data, housing starts in the South have increased by 4% from 2018 to through the first half of 2019. This is less than the 7% increase experienced from 2017 to 2018. Further indicating a housing slowdown is that housing start permits are down 3% from 2018 to the first half of 2019. However, housing permits and starts within

Takeaways

- *Housing permits and starts in Georgia are highly variable with some areas experiencing growth while other areas seeing a decline.*
- *Temperatures are projected to be normal to above average, with normal rainfall during the spring.*
- *Green industry sales within Georgia are projected to be stagnant in 2020 compared to 2019 as there is uncertainty with trade, housing starts and other economic indicators.*

Georgia are highly dependent upon location as there is considerable variability throughout Georgia.

The overall economy is an indicator of green industry growth. The 2019 U.S. gross domestic product (GDP) growth rate is forecasted to be around 1.9%, while the Georgia state product growth rate is expected to be around 1.7% in 2019 (U.S. government spending). In 2020 there is an expected 3.2% and 3.1% growth rate for the U.S. and Georgia, respectively. However, Kiplinger projects a 1.8% U.S. growth rate in GDP. Furthermore, 38% of economists believe a recession will begin in 2020 (National Association for Business Economics survey) with 60% of U.S. adults believing a recession will begin in 2020 (Washington Post survey). Further complicating the economic outlook is the trade war with China. Direct impacts to the industry will be increased input costs, with indirect impacts being higher costs for other goods that

could result in consumers choosing other goods to plants, turf, etc.

Perhaps the biggest driver of green industry product demand is the weather. National Weather Service projections for the winter of 2019-2020 indicate above-average temperatures for the southern part of Georgia with normal temperatures for the northern part of Georgia. During the growing and main purchasing season (i.e., spring and summer), the industry should expect above-average temperatures across Georgia. With respect to rain, normal rainfall is projected during the winter, spring and summer of 2020.

Given slowing housing starts, uncertainty in U.S. and Georgia economies, and the potential for above-average temperatures during 2020, the green industry will most likely be stagnant in 2020, if it does not have lower sales. ■

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