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## **UNIVERSITY OF GEORGIA**

Georgia Farm Gate Value 20 Year Trends - Nursery, Greenhouse, and Turf

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The ornamental horticulture industry has been a strong contributor to Georgia's agricultural economy since farm gate data collection began in 2001, especially greenhouse production, which consistently has been one of the top ten Georgia agricultural commodities by production value in the last 10 years. See Figure 1 for normalized, inflation adjusted (to 2020) farm gate values of container nursery, field nursery, greenhouse, and turf production value from 2001 to 2022.

All farm gate values declined significantly coming out of the Great Recession (post-2008). The loss in farm gate value was due to inefficient firms going out of business due to dropping demand and lower prices. The drop in farm gate values continued until around 2011 when most sectors experienced a stabilization and/or upturn of farm gate values. Campbell et al. (2017) has a detailed discussion of the impact of the Great Recession on the Georgia ornamental horticulture industry.

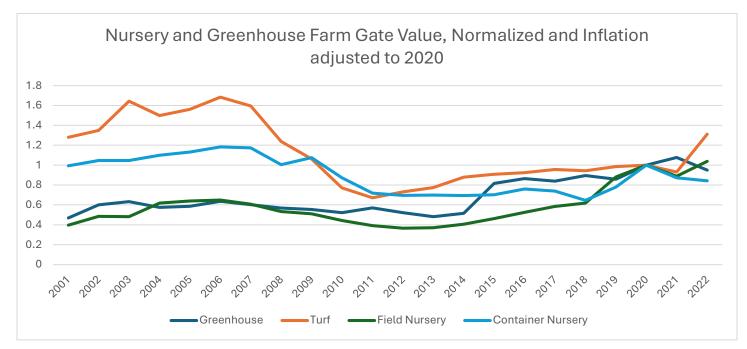


Figure 1. Normalized and inflation adjusted (to 2020) ornamental horticulture sector farm gate values.

As COVID hit the U.S., many businesses sent their workers home due to quarantines. This led to an increase in at-home landscaping projects which led to a boom in the industry. For instance, in 2013 (the lowest point of farm gate for turf after the Great Recession), turf farm gate value was at 37% of the 2020 farm gate value. Looking only at 2019 farm gate values, greenhouse, container nursery, field nursery, and turf values were 86%, 78%, 88%, and 98% of their 2020 levels, respectively. This implies that all these ornamental sectors had considerable growth, especially greenhouse, container, and field nursery. This matches Campbell, Rihn, and Campbell (2021) that estimated the January-July 2020 increase in retail sales in Georgia at \$11.8 million.

Source: University of Georgia College of Agricultural and Environmental Sciences Farm Gate Value Report, calculations made by authors

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However, in 2021 there is a decrease in farm gate value for container and field nursery and turf farm gate value which is most likely due to plant shortages given the unexpected demand in 2020. Greenhouse still had positive farm gate value growth of 7% above 2020 levels. In 2022, greenhouse farm gate values dropped back to 2020 levels while turf was 31% above 2020 levels.

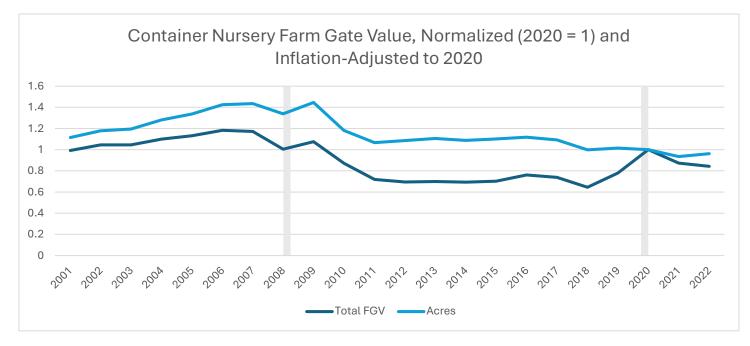
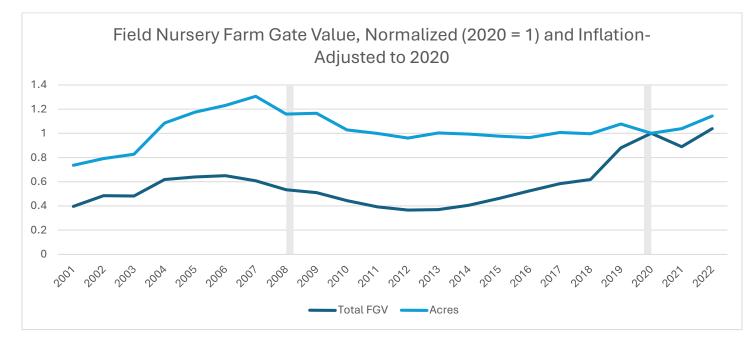


Figure 2. Normalized and inflation adjusted (to 2020) container nursery farm gate values and acreage.

Container nursery production decreased following the Great Recession until around 2011 as farm gate values began increasing. Acreage declined after the Great Recession until 2012 then increased until 2018. Farm gate values and acreage began decreasing in 2017. The slow gains from 2012-2018 were due to industry consolidation and retirements within the industry. In 2018, acreage was 64% of 2020 acreage with farm gate value equal to the 2020 value. In 2021, both acreage and farm gate values were slightly down.



Source: University of Georgia College of Agricultural and Environmental Sciences Farm Gate Value Report, calculations made by authors

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## Figure 3. Normalized and inflation adjusted (to 2020) field nursery farm gate values and acreage.

Field nursery farm gate values began decreasing prior to the Great Recession with the recession speeding the farm gate value reduction. The reduction in acreage was due to farm consolidations Farm gate values bottomed out around 2012 and began an upward turn. Interestingly, the farm gate value in 2018 was only 62% of 2020 value with the 2019 value having grown by 16%. Acreage flatlined from 2011-2018. Post-COVID acreage increased by 14% which is most likely due to expansion to capture post-COVID demand. The farm gate value decreased in 2021 and rebounded in 2022. One of the main drivers from 2012 onward has been new home construction and a rise in environmentally friendly design trends which have driven up both pricing and acreage to meet demand.

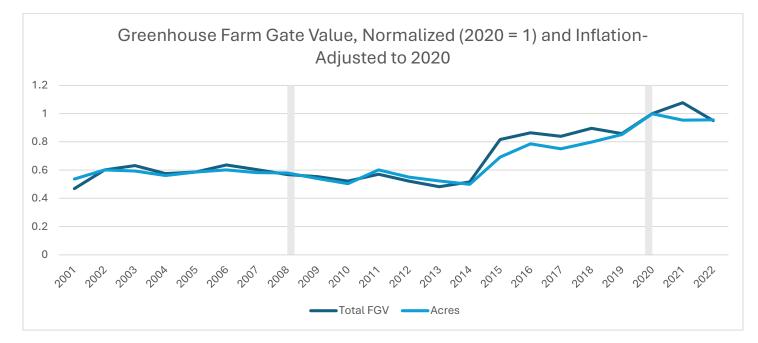


Figure 4. Normalized and inflation adjusted (to 2020) greenhouse farm gate values and acreage.

Greenhouse farm gate values and acreage are almost mirror images of each other from 2001 through 2014. In 2015 farm gate values increased at a faster rate than acreage most likely due to higher prices. Both acreage and farm gate values increased by around 15% from 2019 to 2020 implying that firms were able to take advantage of higher demand due to COVID. Post-COVID farm gate values increased into 2021 but fell to 2020 levels in 2022. This implies the COVID effect began to wane in 2022. Acreage stabilized from 2020 to 2022.

This sector has seen growth beyond 2008 numbers, largely due to younger customers discovering houseplants and gardening around 2014, with even more entering the market after the 2020 COVID lockdowns. The influx of these new and younger customers has made greenhouse production more secure than other sectors.

Source: University of Georgia College of Agricultural and Environmental Sciences Farm Gate Value Report, calculations made by authors

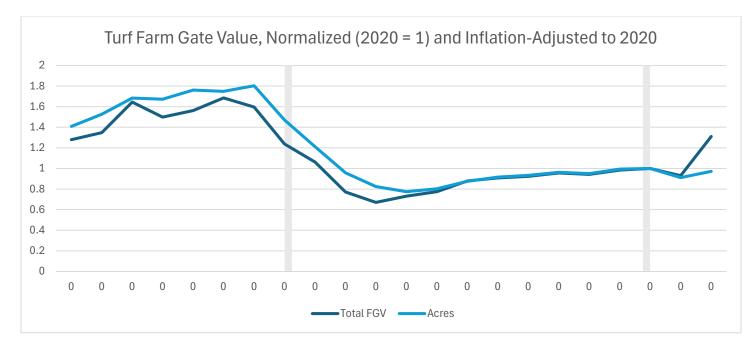


Figure 5. Normalized and inflation adjusted (to 2020) turf farm gate values and acreage.

The trends associated with turf farm gate values and acreage are almost mirror images of each other from 2001 through 2021. Both acreage and farm gate value peaked around 2006-2007, fell to their lowest levels in 2011-2012, then stabilized until 2021. Minimal growth was seen in acreage and farm gate value in the years leading up to 2020. Post-COVID saw farm gate value increase by 31% with acreage remaining stable. This indicates two things occurred: 1) producers did not quickly introduce new acreage and 2) increased prices drove the increased farm gate value.

All in all, each ornamental horticultural sector experienced drastically different effects from the Great Recession and COVID. The Great Recession was detrimental to both farm gate values and acreage, but turf experienced the biggest losses as a percent of their pre-recession values. With respect to COVID, each ornamental horticulture sector saw farm gate value growth, though differences in responses occurred. The turf sector did not grow production area while field nursery production acreage increased. Post-COVID also saw all sectors have an increase in 2020 though the impact in 2021 and especially 2022 varied by sector.

## References

Campbell, B., A. Rihn, and J. Campbell. 2020. Preliminary Economic Impact of COVID-19 on Green Industry Sales in the Southeastern U.S. AGECON-20-05-PR.

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Source: University of Georgia College of Agricultural and Environmental Sciences Farm Gate Value Report, calculations made by authors

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