

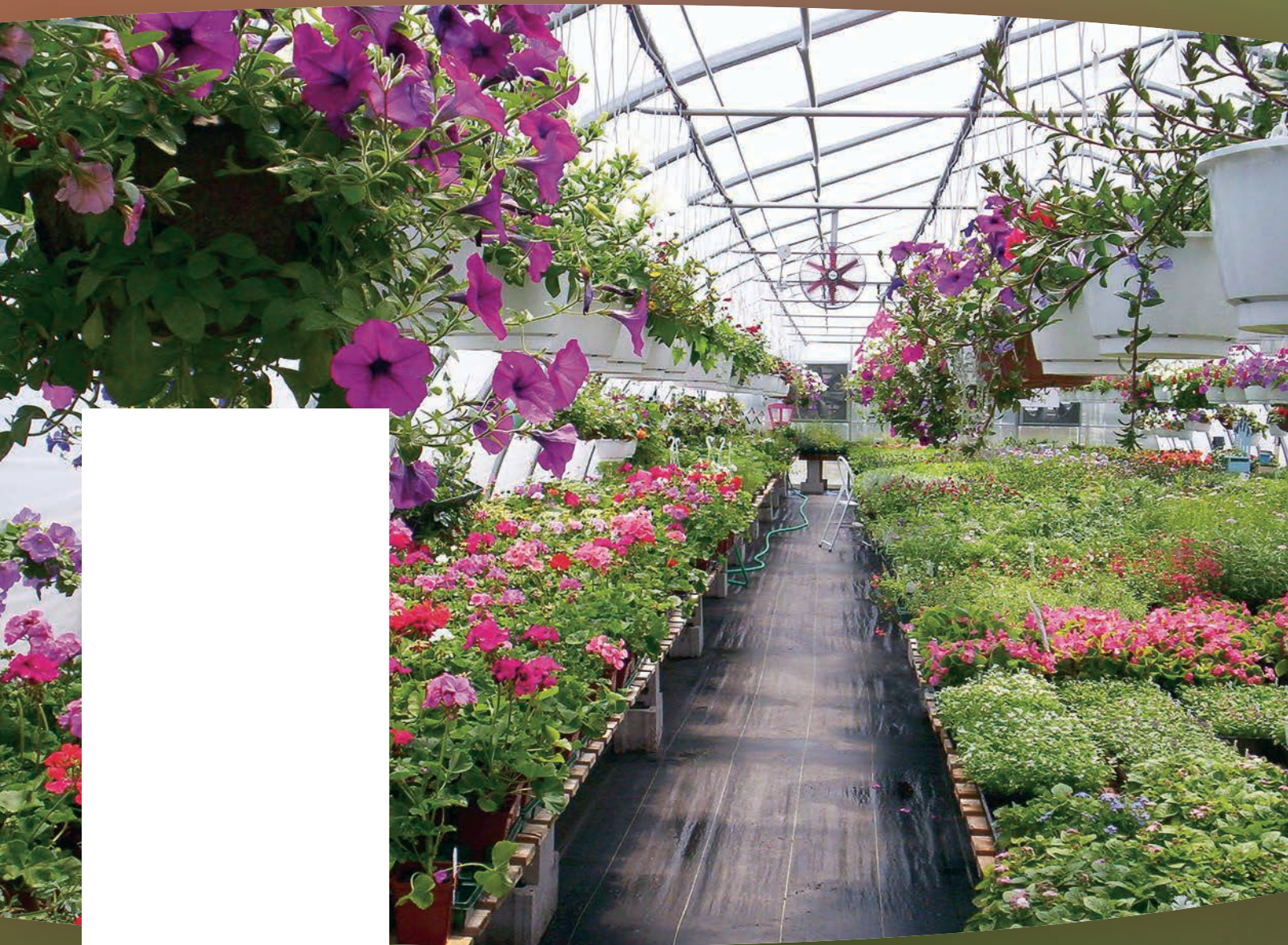
Tennessee
GREENTIMES

VOL. 22/NO. 2
SUMMER 2021

The Official Publication of The Tennessee Nursery and Landscape Association

A Growing Future:
Statewide Economic Impacts
of the Tennessee Nursery Industry

~~~~ *PLUS* ~~~~  
Enhancing the Green Industry through  
**Horticultural Therapy**









# Tennessee GREENTIMES

The Official Publication of The Tennessee Nursery and Landscape Association

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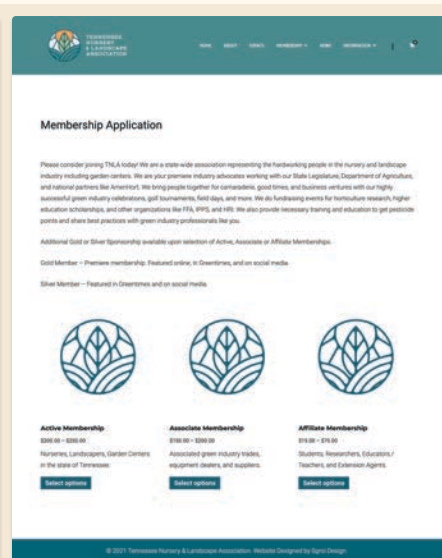
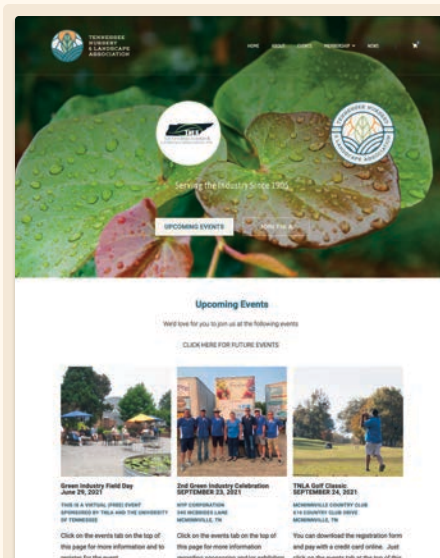
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# WIND in OUR SAILS

What a whirlwind! As we roll past spring and into summer, I feel the need to slow down, take a breath, and reflect on how exciting it is to be a part of this industry. Spring saw soaring sales and a growing demand for product, not just regionally, but across the country.

The nursery industry has always had its challenges and rewards. While 2020 had many challenges, it also brought rewards for our industry. There are sure to be more challenges in the near future such as cicadas entering our region and tree shortages around the country due to the Texas freeze. But after a backbreaking spring, I believe we all deserve to take time to celebrate the successes of our industry this past season.

There will be several opportunities to celebrate Tennessee horticulture. The University of Tennessee is hosting a virtual Green Industry Field Day, June 29th. We are also hosting the second annual TNLA Green Industry Celebration on September 23, 2021. I invite all those in the industry to come out for a day of business and fun. Heck, come down for the whole week and tour many of the great nurseries and garden centers throughout the mid-state. Our annual golf tournament is scheduled to take place September 24th. Stay tuned for more updates and details. We look forward to seeing you there!



[www.TNLA.com](http://www.TNLA.com)

One last thing, I encourage you to check out TNLA's updated website! We are now able to accept membership applications and payment online. Be sure to spread the word to interested potential members!

Respectfully submitted,

**Morgan Adcock**  
TNLA President

The *Tennessee Greentimes* is the official publication of The Tennessee Nursery & Landscape Association, Inc.

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982 Northcutt Cove Road  
McMinnville, TN 37110

## Calendar OF EVENTS

JUNE  
29, 2021

### Green Industry Field Day (Virtual)

*Hosted by TNLA and the University of Tennessee*

Please visit the TNLA website  
[www.tnla.com](http://www.tnla.com) (Events) for more  
information, the registration link, and the program.

4 pesticide C3, C10, C12 credits  
are available for the program.

SEPTEMBER  
23, 2021

### Green Industry Celebration

*NYP Corporation, McMinnville, TN*

Please visit the TNLA website [www.tnla.com](http://www.tnla.com)  
for information regarding exhibiting,  
sponsoring, etc.

SEPTEMBER  
24, 2021

### TNLA Golf Tournament

*McMinnville Country Club*

For more information and to register,  
[www.tnla.com](http://www.tnla.com)

SEPTEMBER 30 -  
OCTOBER 1, 2021

### Middle Tennessee Nursery Association Trade Show

*Milner Recreation Center  
(formerly McMinnville Civic Center)*

[www.mtna.com](http://www.mtna.com) for information  
regarding exhibiting, sponsoring, etc



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# A GROWING FUTURE:

## *Statewide Economic Impacts of the Tennessee Nursery Industry*

*Amy Fulcher, UT Department of Plant Sciences*

*Jared Bruhin, UT Center for Profitable Agriculture*

*Burt English, Kim Jensen, and Jamey Menard,  
UT Department of Agricultural and Resource Economics*

*Susan Schexnayder, UT Department of Forestry,  
Wildlife and Fisheries*



In 2020, a consortium<sup>1</sup> of Green Industry and UT entities worked in partnership to conduct a survey of the Tennessee Green Industry. Respondents were asked to answer based on their 2019 economic information or the most recent 3 years. This survey allowed for a current, comprehensive analysis of the impact of the Green Industry to the state of Tennessee’s economy, including jobs. This analysis was conducted using the economic input/output model, which determined both the direct and indirect impacts of the industry.

The survey was distributed to Tennessee Department of Agriculture license holders in nursery (581), greenhouse (257), and dealer (542) categories for a total of 1,380 survey recipients. There were 258 survey responses. Responses were divided into wholesale only, wholesale with some retail, or retailer/broker – no production. In this article, nursery and greenhouse firm data are combined and results are reported for wholesale only and wholesale with some retail sales.

<sup>1</sup> Middle Tennessee Nursery Association, Tennessee Nursery and Landscape Association, Tennessee Department of Agriculture, UT Extension, UT Center for Profitable Agriculture, and the UT Human Dimensions Research Lab.

The average number of employees at wholesale only firms was 10:

|               |                                    |
|---------------|------------------------------------|
| 5.5 full-time | 1.1 non-H2A, temporary or seasonal |
| 1.5 part-time | 1.9 H2A                            |

and the average annual payroll for these nurseries was \$370,071.

The average number of nursery employees at wholesale nurseries with some retail sales was 11.9:

|               |                                    |
|---------------|------------------------------------|
| 7.1 full-time | 1.0 non-H2A, temporary or seasonal |
| 3.8 part-time | 0 H2A                              |

and the average annual payroll was \$283,546.







For both wholesale only and wholesale with some retail sales, 62% of bare-root and container liners are purchased from other Tennessee nurseries and 59% of other liners such as seeds and plugs come from in-state. For all other expenses, ranging from inputs and expenses such as irrigation, burlap, fertilizer, and insurance, at least 90% were purchased in Tennessee. Average expenditures were \$219,240 for wholesale only and \$195,514 for wholesale nurseries with some retail sales. The largest expenses were:

- liners
- container substrate and soil conditioners
- burlap
- insurance

The IMPLAN economic impact model accounts for the impacts of the nursery and greenhouse industry's economic activity on other segments of the economy and calculates its direct contributions as well as the indirect, multiplier effect it has on the state's overall economy. The direct impacts are captured from the sales of nursery and greenhouse crops. The two indirect impacts are accounted for in the model as 1) the nursery industry's purchases of inputs such as fertilizer or liners, and services performed, such as repairs to a greenhouse cooling system, and 2) employee wages and salaries and the items and services that are

purchased by nursery and greenhouse employees. These indirect impacts can be thought of as the trickledown effect of the nurseries and greenhouses on the state's economy.

### **Economic Impact of Nursery Expenditures**

When considering expenditures, wholesale only nurseries contribute over \$155,000,000 in economic activity to the state; the wholesale with some retail expenditures were responsible for an additional \$86,600,000 in statewide economic activity. The total employment contribution included 1,633 direct jobs and 701 indirect jobs for wholesale only and those firms with some retail combined. Nursery and greenhouse expenditures generated \$11.2 million in state and local taxes.

The primary industries impacted by Tennessee nursery and greenhouse industry expenditures are:

- greenhouse and nursery production
- businesses providing support services for agriculture and forestry
- insurance firms
- building supply companies and garden supply stores
- lawn and garden equipment manufacturing

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## Jobs Supported by Nursery Expenditures and Owner and Employee Spending

Tennessee nursery and greenhouse business expenditures primarily support jobs in the following sectors:

- support activities for agriculture and forestry
- greenhouse and nursery production
- building and garden supply stores
- automotive repair and maintenance
- commercial and industrial machinery and equipment repair and maintenance

Spending by nursery owners and employees also has a positive impact on the state's economy and supported employment primarily in:

- full and limited-service restaurants
- hospitals and physicians
- general merchandise retail stores

## Economic Impact of Nursery Expenditures, Payroll and Net Returns

Nursery expenditures, owner and employee payroll, and net returns all contribute to the nursery and greenhouse industry's impact on the

state's economy. The individual effect of nursery expenditures is presented above. The individual effects of nursery payroll and net returns are available in the article "Estimated economic contributions from the nursery/greenhouse industry in Tennessee" listed at the end of this article.

## Limitations

Readers are reminded these results reflect a single year of data, 2019. Additionally, COVID-19 may have influenced the results. This survey did not account for land rents, capital outlays for buildings and equipment, management wages, and other fixed costs in the net return calculations. Additionally, a separate analysis is required to capture end user expenditures such as from home gardeners.

The complete economic analysis can be accessed at:

[https://ag.tennessee.edu/arec/Documents/publications/RR\\_20\\_001\\_\\_003.pdf](https://ag.tennessee.edu/arec/Documents/publications/RR_20_001__003.pdf)

and should be cited as:

Jensen, K.L., B. English, J. Menard, S. Schexnayder, J. Bruhin, and A. Fulcher. 2020. Estimated economic contributions from the nursery/greenhouse industry in Tennessee. University of Tennessee, Department of Agricultural and Resource Economics, RR 20-001. 🌿

# Economic Impact of the Tennessee Green Industry

## ECONOMIC IMPACT



The Tennessee nursery and greenhouse wholesale industry, including those wholesalers with some retail sales, was projected to *directly contribute \$830,900,000* in economic activity to the state's economy in 2020. After accounting for multiplier effects, the *total impact was projected at \$1,546,100,000*.

## JOBS

The nursery and greenhouse industry was estimated to *employ 13,126 people* and with multiplier effects, *support 19,409 total jobs* in 2020.



## TAX REVENUE

The Tennessee nursery and greenhouse wholesale industry, including those wholesalers with some retail sales, was projected to *contribute \$44,200,000 in state and local taxes* in 2020.



## FUTURE GROWTH

The Tennessee nursery and greenhouse industry indicated they anticipate their *nursery sales will grow on average 16.5%* over the next five years.



# Enhancing the Green Industry through HORTICULTURAL THERAPY

By Dr. Derrick Stowell, CTRS, HTR

Education and Horticultural Therapy Program Administrator,  
UT Gardens, Department of Plant Sciences

The use of horticulture as therapy has existed in the United States for many years. The formal development of horticultural therapy as a profession is recognized to have begun with the creation of the National Council for Therapy and Rehabilitation through Horticulture (NCTRH) in 1973. In 1983, NCTRH changed its name to the American Horticultural Therapy Association (AHTA). The AHTA sets the standards for Horticultural Therapy practice and offers a professional registration system (AHTA, n.d.).

Renewed interest in horticultural therapy has increased demand for new educational programs to serve and train potential practitioners. This renewed interest is due to several factors including a heightened awareness of emerging and ongoing environmental issues, new focus on benefits of nature and the people-plant connection, and growing interest in gardening among the general public. The COVID-19 pandemic has also played a role in enthusiasm and desire to learn more about gardening. Tracey Tally, who is an executive board member of the American Seed Trade Association, recently stated that the demand for seeds in 2020 “tripled in size” (Russell, 2020). As people began spending more time outside due to social-distancing guidelines and people started planting vegetable gardens to provide food during uncertain times, new opportunities for both the green industry and horticultural therapy were created.

The growing interest in gardening is helping increase interest in horticultural therapy. As a quick definition, horticultural therapy is the “participation in horticultural activities facilitated by a registered horticultural therapist to achieve specific goals within an established treatment, rehabilitation, or vocational plan (AHTA, 2017).” horticultural therapy is uniquely positioned to not only raise awareness of the green industry to the broader community, but it can also connect elements of horticulture/agriculture production, sustainability issues, and health and wellness to a larger audience.

To meet this need, colleges and botanical gardens around the country offer classes and programs in the therapeutic use of horticulture (Fig. 1, 2). These classes and programs often help interest healthcare professionals and horticulture students in accessing more formal education opportunities related to horticultural therapy (Fig. 3). The University of Tennessee (UT) and UT Gardens has recently created a new undergraduate certificate in horticultural therapy. This program is scheduled to begin in Fall of 2021. Importantly, this new horticultural therapy certificate program has been accredited by the AHTA. Applications for this new certificate program will be available pending final approval from the Southern Association of Colleges and Schools Commission on Colleges.



Fig. 2: Student-generated drawings were evaluated and the winning design was implemented at a horticultural therapy venue.

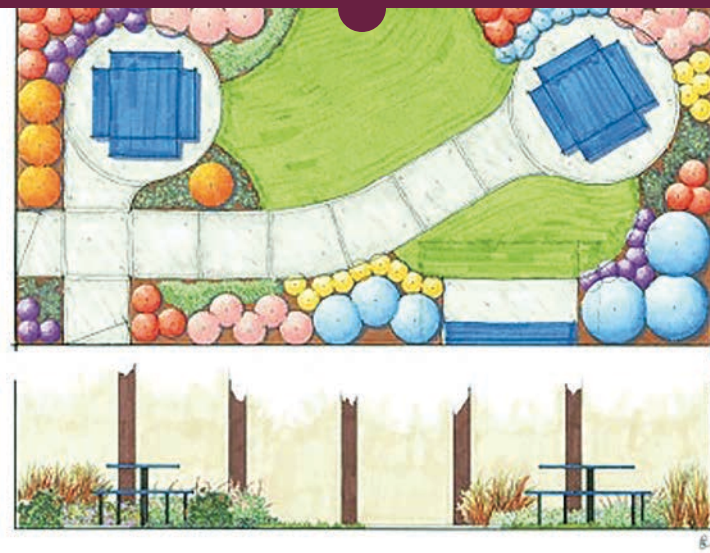






Fig. 1: Dr. Stowell (2nd person from the left) leading a TN AgrAbility-sponsored horticulture therapy workshop for veterans.

Fig. 3: Peninsula Behavioral Health Hospital (before). Staff and patients perceive the outdoor space to be uninviting and non-therapeutic.



Fig. 4: Peninsula Behavioral Health Hospital (after). After mixed species of greenscape installation and screened seating, the therapeutic garden is a therapeutic and welcoming green space.





The University of Tennessee's Horticultural Therapy certificate program, which has been designed for access by working professionals, will be delivered in an accelerated, hybrid format. The certificate consists of three college-level for-credit courses arranged to provide a total of nine hours of college credit. Students completing the certificate with a grade of C or better will have fulfilled the horticultural therapy coursework requirements for AHTA's professional registration. This certificate program is designed to give students the opportunity to learn about horticultural therapy and develop a horticultural therapy program plan that they can use in their own practice. The horticultural therapy certificate at UT has already received interest from students from across disciplines, such as plant sciences, agriculture, psychology, counseling and education.

As this interest suggests, horticultural therapy is interdisciplinary by nature and incorporates expertise and experience across agriculture-related professions and education, as well as health care-related professions and education (Fig. 2 – 4). One way that the agriculture/horticulture industry can reach a broader awareness among the general population is to utilize the connections made by horticultural therapists. As an example, the UT Gardens' Horticultural Therapy program has served over 7,000 individuals with health conditions or disabilities and provided training, consulting, and therapeutic garden design for over 2,000 health care professionals since its creation in 2012. Numerous professionals have benefited from the services offered by the UT Gardens including assisted living/long-term care facilities, behavioral health, psychology, education, and veterans' programs (Fig. 1).

UT Gardens' Horticultural Therapy program has collaborated on federal grants with organizations such as *Tennessee AgrAbility* Project that connects veterans to agriculture and the therapeutic benefits of horticulture. This summer, the UT Gardens Horticultural Therapy program is collaborating with a PhD student in Psychology to design and conduct a pilot program that will help measure the impact of horticultural therapy on pandemic-related stress. Additional collaborations across disciplines will continue to offer opportunities for research and program development.

For more information on the University of Tennessee Horticultural Therapy programs contact Dr. Derrick Stowell, HTR, CTRS at 865-974-7151 or [dstowell@utk.edu](mailto:dstowell@utk.edu)

For more information about professional registration through AHTA visit: <https://www.ahta.org/professional-registration/>

### ADDITIONAL READING

- American Horticultural Therapy Association (n.d.). About the American Horticultural Therapy Association. Retrieved April 15, 2021 <https://www.ahta.org/about-ahta>
- American Horticultural Therapy Association (2017). AHTA Definitions and Positions. Retrieved April 15, 2021 <https://ahta.memberclicks.net/assets/docs/definitions%20and%20positions%20final%206.17.pdf>
- Russell, A. (2020). Need for vegetable seeds strains supplies. AgriLife Today. Retrieved April 15, 2021 <https://agrilifetoday.tamu.edu/2020/04/20/need-for-vegetable-seed-strains-supplies/>

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# *Pandemic Buying*





# *Southeastern U.S. Consumers' Plant Shopping Behaviors During and After the COVID-19 Pandemic*



Figure 1. At the height of the pandemic, signage helped to provide guidance to customers about social distancing while shopping, even when outdoors. *Photo courtesy of David Bates, Bates Nursery and Garden Center.*

*By Dr. Alicia L. Rihn<sup>1</sup>,  
Dr. Benjamin Campbell<sup>2</sup>, and Dr. Julie Campbell<sup>3</sup>*

*<sup>1</sup>Assistant Professor in the Department of Agricultural and Resource Economics at The University of Tennessee*

*<sup>2</sup>Associate Professor in the Department of Agricultural and Applied Economics at the University of Georgia.*

*<sup>3</sup>Assistant Research Scientist in the Horticulture Department at the University of Georgia*

The COVID-19 pandemic introduced a lot of uncertainty for firms and consumers alike from lockdown to supply chain disruptions to safety concerns. As the Green Industry ramps up for 2021, supply chain disruptions are being felt, which is troublesome given the bumper year in sales that 2020 turned out to be. Many homeowners and consumers turned to gardening and landscaping projects as healthy activities during lockdown. Ideally, 2021 will follow similar trends with more consumers valuing and engaging in horticulture-related activities. As consumers seek out products for this upcoming growing season, it is important to be aware of how COVID-19 has impacted their shopping behavior and to consider potential actions retailers could take to meet their consumers' needs.

In 2020, Green Industry retailers altered their shopping policies (Figure 1) and delivery options to aid in minimizing disease spread while still meeting consumers' needs. Specifically, online ordering/delivery and curbside pickup options were added which are quite different from brick and mortar stores that typically dominate the industry's retail landscape. In 2018 for instance, 82% of firms selling plants were not using online sales methods, yet direct-to-consumer online sales accounted for the majority of consumer purchases for other items (Baker et al., 2018).

A joint research effort by University of Georgia and University of Tennessee researchers used an online survey to address the question of how consumer shopping behaviors for ornamental plants changed due to the pandemic and how consumers intend to shop for plants in a post-pandemic world. Data was collected in July 2020, and 670 consumers from the southeastern U.S. (including people from Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee) participated in the research. The majority of respondents indicated they were under a city/county or state stay-at-home order at the time of the study. Respondents indicated they spent \$586 on lawn and gardening activities in 2019 with \$204 on landscaping plants. In 2020, respondents' expenditures increased 3.4% and 4.6% compared to their spending in 2019. Similarly, curbside pickup and online expenditures increased 4.6% and 4.1% between 2019 and 2020. This equates to approximately \$306.4 million in additional sales in January-July, 2020, when compared to the same time frame in 2019 provided that 77% of households participate in lawn/gardening activities and the number of households in the southeast stays consistent (Cohen & Baldwin, 2018; U.S. Census Bureau, 2019).

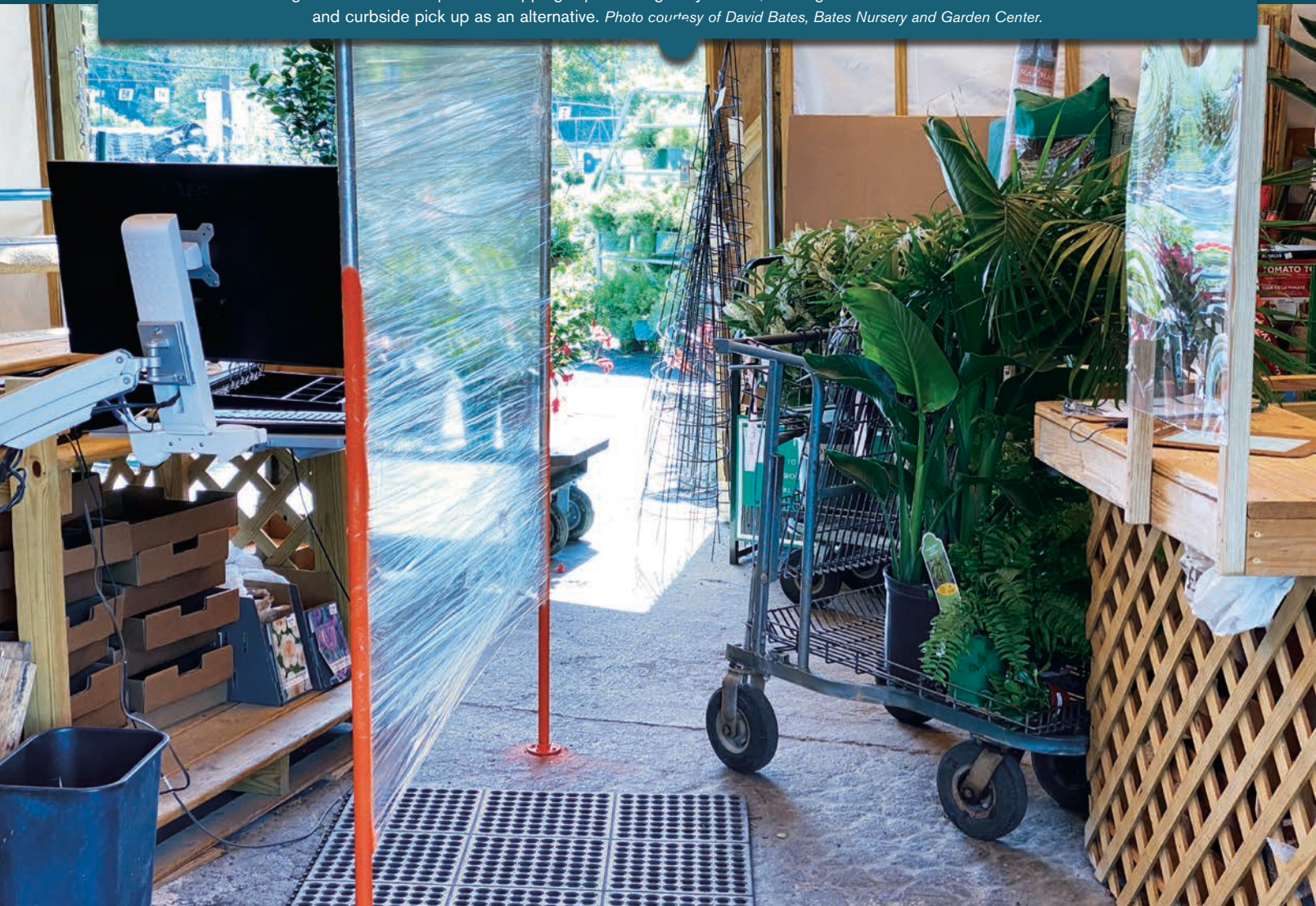


Table 1<sup>a</sup>. Anticipated Changes in Consumers' Plant Purchasing Activities After the Pandemic

| PURCHASING HABITS AFTER PANDEMIC (% of Sample) |                     |                            |                            |                                        |
|------------------------------------------------|---------------------|----------------------------|----------------------------|----------------------------------------|
| State                                          | Number of Responses | Similar to Before Pandemic | Similar to During Pandemic | Combination of Before/ During Pandemic |
| Alabama                                        | 67                  | 48%                        | 20%                        | 31%                                    |
| Florida                                        | 121                 | 53%                        | 17%                        | 30%                                    |
| Georgia                                        | 168                 | 58%                        | 20%                        | 22%                                    |
| Louisiana                                      | 37                  | 49%                        | 22%                        | 30%                                    |
| Mississippi                                    | 25                  | 67%                        | 17%                        | 17%                                    |
| North Carolina                                 | 63                  | 60%                        | 17%                        | 23%                                    |
| South Carolina                                 | 120                 | 58%                        | 19%                        | 23%                                    |
| Tennessee                                      | 69                  | 58%                        | 14%                        | 18%                                    |
| Total                                          | 670                 | 57%                        | 18%                        | 25%                                    |

<sup>a</sup> Information from this table is reproduced (with permission from the authors) from publication by Campbell et al. 2020 (UT Agricultural and Resource Economics Extension Report W951).

Figure 2. With the in-person shopping experience greatly altered, some garden centers offered online sales and curbside pick up as an alternative. *Photo courtesy of David Bates, Bates Nursery and Garden Center.*





Respondents were asked to indicate how their plant shopping behavior changed during the pandemic and how they anticipated it changing in a post-pandemic world. The majority (57%) indicated they plan on reverting to their pre-pandemic shopping habits while 43% stated they would change their plant purchasing habits in some way (Table 1). Tennessee respondents were more likely to revert back to pre-pandemic shopping habits than respondents from Georgia. Gen-X consumers were less likely to revert back to pre-pandemic shopping habits than Baby Boomers. Interestingly, respondents who participate in curbside pickup were more likely to revert to pre-pandemic shopping habits while those who purchased more plants online were less likely to revert back to pre-pandemic habits. As consumers become familiar with online purchases, their acceptance and trust of plants received via that avenue are expected to increase. Additionally, online shopping provides consumers with greater access to products that they may not have been exposed to through traditional methods. This is likely to be particularly true for consumers who have not had easy access to garden centers or other brick and mortar establishments. Responses about curbside pickup preferences may reflect the perspectives of consumers who view shopping for plants as an event. For these customers, the trip, the store atmosphere, and on-site interactions are likely to be part of their draw and enjoyment of home gardening and landscaping.

Together, survey feedback from consumers suggests that retailers should carefully consider the trends they are seeing among their customer base, and consider practices and protections that can be implemented to address concerns and special needs to protect your customers (Figure 2). Consider investing in online shopping options if that is what their customers are trending toward. Conversely, the results imply that curbside pickup is less likely to persist in a post-pandemic world, so investing in the curbside pickup experience may be less of a priority.

---

*For the complete manuscript, please view:*

Campbell, B.L., A.L. Rihn, and J.H. Campbell. 2021. Impact of the coronavirus pandemic on plant purchasing in Southeastern United States. *Agribusiness*, 37:160-170. <https://doi.org/10.1002/agr.21685>. An Extension publication by the authors (W951) also is available that shares these results.

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## LITERATURE CITED:

Baker, L.M., C.R. Boyer, H.H. Peterson, and A.E.H. King. 2018. Online opportunities: A quantitative content analysis benchmark study of online retail plant sales. *HortTechnology*, 28(4):516-523.

Campbell, B., A. Rihn, & J. Campbell. 2020. Preliminary Changes in COVID-19 Purchasing Habits of Southeastern US Green Industry

Consumers. University of Tennessee Agricultural and Resource Economics Extension Report W951.

Cohen, P., and I. Baldwin. 2018. National Gardening Survey, 2018. <https://gardenresearch.com>.

U.S. Census Bureau. 2019. QuickFacts. <http://www.census.gov/quickfacts/fact/table/US/PST045219>. 🌿

# GREENING SAFETY CITY

*A Unique Partnership  
Between the Knoxville Police Department  
and UT Forestry Faculty Connects Students  
with Green Infrastructure Opportunities*

*By Robert Walker Fowler, Forestry Masters student;  
Dr. Sharon Jean-Philippe, Associate Professor;  
David Vandergriff, Adjunct Assistant Professor in the  
UT Forestry, Wildlife & Fisheries Department;  
Seth Zaroni and Sam Daniel, Master of Landscape  
Architecture students in the School of Landscape Architecture;  
and Dr. Jennifer Richards, Assistant Professor in the  
UT Agriculture Leadership, Education and  
Communication Department*

On April 15th 2021, students and faculty from the University of Tennessee's forestry and landscape architecture departments joined the Knoxville Police Department and local businesses in a tree planting event at Safety City Park. More than thirty volunteers from these groups came together to plant twenty-seven trees throughout the park. This was the culmination of a year's work undertaken by students at the university, and the first step in what is hoped to be a continuing partnership between KPD and UTK students at Safety City.

Established in about 2000, KPD's Safety City complex was created to teach skills and good safety habits to K through 4th grade elementary school-aged students about vehicular, pedestrian, bicycle, and fire safety. Enclosed within the Knox County park, Safety City is a completely miniaturized community. The facility has roadways, crosswalks, small-scale buildings, traffic signs and signals, and replica housing. Hands-on exercises include classroom instruction and role-playing, a simulated fire event that teaches how to work with firefighters and safely escape from a building, and the instructional visit culminates with attendees piloting child-sized vehicles around the community while safely navigating the roads and following traffic signs and signals. What Safety City lacked was tree canopy coverage. Safety City's most active season is in the summer months when children attendees are on summer break from school. Safety City, which has a high proportion of impervious surfaces with little shade from trees, had become a perfect microcosm of the urban heat island effect.

More than 30 volunteers joined KPD officers, Safety City staff, and UT Forestry faculty and students on the April 15, 2021 planting event.







FEATURE ARTICLE  
Continued

To help address this critical, and missing, aspect of community infrastructure, Knoxville police reached out to the forestry faculty at UT a year prior to the planting event with their problem and a request for assistance. Educators at Safety City hoped that the urban forestry department at UT would provide guidance and assistance in establishing a functional tree canopy that would provide cooling shade for visitors. After agreeing to help, forestry students and faculty enlisted the help of landscape architecture students at UT to design a functional and aesthetic plan that would meet the challenges and needs of the Safety City facility. Twelve hardy tree species were selected to be placed throughout the park with the goals of maximizing canopy coverage and improving landscape aesthetics.



UT Landscape Architecture students Sam Daniel and Seth Zaroni worked with Walker Fowler and Maya Rao on the Planting Plan for Safety City in Knoxville, TN.

Twenty-seven balled and burlapped trees were donated by SiteOne Landscape Supplies, with planting hole excavation contributed by Terry Raby of Airtech Tools.





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Once a plan was chosen, students began recruiting the help of local businesses to overcome budgetary constraints and acquire all the needed material for a successful planting. Trees in the plan, which included Hawthorne (*Crataegus* spp.), Ginkgo (*G. biloba*), Kentucky Coffeetree (*Gymnocladus dioicus*), Sweetgum (*Liquidambar styraciflua*), Tulip Poplar (*Liriodendron tulipifera*), Sycamore (*Platanus occidentalis*), White Oak (*Quercus alba*), Weeping Willow (*Salix babylonica*), Bald Cypress (*Taxodium distichum*), and Princeton Elm (*Ulmus americana*), were donated by SiteOne Landscaping Supply of Knoxville, TN. The team was also extremely grateful for the time and effort volunteered by Terry Raby with Airtech Tools, also Knoxville-based, who excavated all of the tree planting holes for the project. Finally, planning came to fruition: Safety City now has a miniature urban forest which, at maturity, will provide many benefits for the park and its users.

Although the planting is concluded, the project is a continuing effort for students at UT. Now that the trees are installed, students and faculty plan to take advantage of the park's educational mission. Age-appropriate outreach materials and lesson plans are being developed to educate visitors about how an urban forest functions and the benefits that urban forests provide. Lesson plans will be prepared for local educators whose classes visit Safety City. Educational signage will also be created for placement alongside the trees planted into the park. The ultimate goal of the project is not only to provide the benefits of a healthy urban forest, but to make visitors aware of these benefits and engage young visitors' growing interest in our natural world. 🌿



Twenty-seven balled and burlapped trees were donated by SiteOne Landscape Supplies, with planting hole excavation contributed by Terry Raby of Airtech Tools.

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