

IMPACT AND OUTLOOK FOR FLORIDA'S GREEN INDUSTRY

STEVAN NOVAKOVIC, ECONOMIST, FARM CREDIT OF CENTRAL FLORIDA









TABLE OF CONTENTS

- 4 AUTHOR'S NOTE
- 5 IMPORTANT EVENTS IN INDUSTRY HISTORY
- 6 LETTER FROM FNGLA CEO BEN BOLUSKY
- 7 LETTER FROM FARM CREDIT OF CENTRAL FLORIDA CEO REGGIE HOLT
- 8 INTRODUCTION & ECONOMIC IMPACT
- 10 TOTALIMPORTS/ EXPORTS
- 12 TRENDS SHAPING THE INDUSTRY
- 15 LANDSCAPE
- 19 FOLIAGE
- 23 WOODY
- 27 FLORICULTURE
- 31 CITRUS NURSERY
- 35 GARDEN CENTER
- 38 АШЕD
- 42 ABOUT FNGLA
- 43 ABOUT FARM CREDIT OF CENTRAL FLORIDA



AUTHOR'S NOTE

A proclivity towards managing local topography innately defines humanity's transition into agrarian societies. For one origin narrative man's primary task was "tending the garden" in which he lived. It is said that "in the creation of gardens, as in the creation of language, three elements are involved: meaning, function, and form." Ancient Egyptian landscapists attached mystical symbolism to the environs they managed and in 13th-century China gardens became a sanctuary for scholars.

Before the Sunshine State was ever drawn or referenced on a map it was defined by flora. Historians debate whether Florida's nomenclature stems from Ponce De Leon's terming it "La Florida" (the place of flowers) or for "La Pascua de las Flores" (the Spanish term for Easter, "festival of flowers"). More than 200 years later the famed botanist William Bartram explored the northern part of the state documenting the many plants, including hosts of species brought by the Spanish that had naturalized into the local landscape.

Flashing forward to 2022, managed plant life in the state of Florida is infrastructure. Festivals across our 67-counties from major theme parks to small towns are devoted to flowers, shrubs, and trees. Landscaping is conducted around retention ponds and expressway exits, as well as downtown nightlife districts. Whether customers are local suburbanites tending their yards or large maintenance firms buying fleet equipment, garden centers and allied businesses provide the tools for keeping outdoor spaces "spruced up." FNGLA and Farm Credit of Central Florida members are represented in all aspects of the landscape, foliage, woody, floriculture, citrus nursery, garden center, and allied operations across the state. More than 20 million Florida residents and 100 million annual tourists experience the benefits of businesses dedicated to beautifying everyday life.

Stevan Novakovic, Economist, Farm Credit of Central Florida



STEVAN NOVAKOVIC

ABOUT OUR ECONOMIST

Stevan Novakovic holds an M.S. in Public Policy from Georgetown University with a focus in econometrics. Prior to joining Farm Credit of Central Florida he conducted economic research on agricultural commodities for IHS Markit (previously Informa Economics Group), and spent time in hedging /risk management and as a commodities trader for Central States Enterprises, Inc. Stevan also earned an M.A. from Columbia University and undergraduate degrees from the Moore School of Business at the University of South Carolina, where he triple-majored in International Business, Global Supply-Chain and Operations Management, and Finance.



IMPORTANT EVENTS IN INDUSTRY HISTORY:

1994

Flower and Garden Festival.

1737	Prince Family Nursery, the first commercial nursery in America, is opened by Robert Prince in Flushing, New York. It was later called the Linnaean Botanic Garden and Nursery and advertised 10,000 trees by the end of the 18th century.
1741	The first landscaped plantation gardens were begun by Henry Middleton near Charleston, SC on his property. Middleton Place had expansive, maintained ornamental gardens including six terraces and two "butterfly lakes."
1767	Moon Nurseries in Bucks County, PA is established.
1806	Thomas Jefferson attempts to replicate European style lawn practices at Monticello.
EARLY 1800S	Grant Thorburn, a native of Scotland, starts a seed farm in New York. After his business failed and he spent a year in debtor's prison, he built a new seed business while marketing a gardener's calendar and the first American instructional seed catalog.
1840	The Summer brothers founded Pomaria Nursery near Newberry, SC, expanding throughout the mid-state region. Avid horticulturalists, the brothers sold 500 varieties of apples, 400 varieties of pear, 600 varieties of peach, ornamental trees and shrubs, and a large collection of old roses. The nursery's infrastructure included a series of 4,000 square foot glass greenhouses and survived until it was destroyed by Union troops in 1865.
1862	The United States Department of Agriculture is created.
1871	The first lawn sprinkler in the US is patented.
1872	Congress establishes the first national park at Yellowstone.
1882	The "Indoor Foliage Capital of the World," Apopka, FL is founded.
1922	The American Horticultural Society is formed.
1952	Florida Nursery Growers Association holds its first meeting in Miami.
1950\$	The advent of American suburbs spurs the notion of "keeping up with the Joneses" – especially applied to the appearance of front yards.

Epcot debuts its Garden Railway, beginning an annual celebration to be called the International



LETTER FROM FNGLA CEO BEN BOLUSKY

The Florida Nursery, Growers and Landscape Association (FNGLA) and Farm Credit of Central Florida (FCCF) teamed up in 2021 to begin a series of studies on the economic muscle of Florida's nursery and landscape industry. This type of core information is critically important for FNGLA's industry advocacy role in the local, state and federal public policymaking arenas.

Working side-by-side with FCCF, FNGLA used its industry insights to help shape this pivotal survey instrument and promote its outreach. In turn, FFCF exercised its analytical expertise to tabulate and measure the aggregate results. A BIG tip of FNGLA's cap goes to FCCF!

Both organizations knew it was imperative to assess how Florida's nursery/landscape industry endured everything the pandemic was throwing at these businesses. From suddenly having to implement unfamiliar operational protocols, to figuring out how to comply with new workplace health/safety regulations, it was not easy. Of course, this was all exacerbated by a persistent and tightening workforce shortage.

Refreshingly, consumers rediscovered the joys of gardening and the many health benefits of plants to reduce stress and anxiety. Anecdotally, we heard how unexpectedly busy the industry was. Yet, there was no real data. So, FNGLA and FCCF joined together on this initial study to focus on sales trends and employment figures in a chaotic 2020.

FNGLA thanks the hundreds of FNGLA-member production nurseries, landscape and irrigation firms, retail garden centers and horticultural suppliers who responded to the survey. Thanks directly to your input, the survey's results soundly reflect our industry's output and employment in 2020.

FNGLA looks forward to continuing to work with FCCF to produce a series of meaningful economic and business studies of Florida's essential nursery and landscape industry.

Thanks,

Ben Bolusky, CEO Florida Nursery, Growers and Landscape Association



BEN BOLUSKY | CEO FLORIDA NURSERY, GROWERS AND LANDSCAPE ASSOCIATION



LETTER FROM FARM CREDIT OF CENTRAL FLORIDA CEO REGGIE HOLT

Farm Credit of Central Florida has a long history of working with FNGLA and its members by providing the financing and support that helps to ensure the continued growth and fiscal well-being of the industry. This commitment is substantiated by firms in the nursery category representing one of the largest segments of Farm Credit of Central Florida's portfolio with more than \$129 million in committed loans.

Joining forces with FNGLA to conduct a survey of its members, we have analyzed the results in an attempt to provide insights that we hope are found to be useful by those in each of FNGLA's seven divisions. Further, we conducted an economic impact assessment of the overarching industry and have attempted to address some of the key trends impacting members across the state.

The past two years have tested the environmental horticulture industry as the global pandemic has instigated supply chain bottlenecks, labor force shortages, increased population growth across the state, and rapidly changing consumer preferences. In the face of these developments we have seen our members respond rapidly and tackle the challenges head on.

Farm Credit of Central Florida would like to thank FNGLA for its partnership over the years and its members for their willingness to participate in this inaugural research endeavor. I hope that you enjoy reading and learning from this report as much as I did.

Thank you for allowing Farm Credit of Central Florida to continue to serve you and please don't hesitate to reach out if we can be of assistance.

Thanks,

Reggie Holt
President & CEO
Farm Credit of Central Florida



REGGIE HOLT | PRESIDENT & CEO FARM CREDIT OF CENTRAL FLORIDA



INTRODUCTION

The following report is intended to be a momentary snapshot of the broad business sectors which comprise the membership of the Florida Nursery, Growers, and Landscape Association (FNGLA), as well as a tool to help others to understand and get a better picture of this overarching industry.

Throughout the following pages some terms will be used interchangeably, especially "green industry" and "environmental horticulture." These encompass the businesses and individuals that provide the means to produce, install and maintain plants to enhance the human and natural environment. All of FNGLA's members and the industry-at-large are in some

way involved with this, whether they conduct the planting, the upkeep, provide the tools, or, like Farm Credit of Central Florida, disperse financing which helps keep the state looking lush

In order to develop this study a survey was conducted of all 1,200 of FNGLA's members with more than 250 responses. Additional data utilized for analysis was accumulated from USDA's National Agricultural Statistics Service, Florida Department of Agriculture's Division of Plant Industry, previous economic impact studies from University of Florida's IFAS, and Implan Group.

ECONOMIC IMPACT

Florida's nursery and landscape industry is huge and growing. In 2020, the commerce stemming from environmental horticulture was responsible for \$31.4 billion in economic output and provided jobs for more than 266,000 workers in the Sunshine State. While some sectors of the industry suffered mightily during the initial onset of the Covid-19 pandemic, nursery, landscape, and associated businesses as a whole experienced a surge of increased demand. As offices shut, work-from-home encouraged individuals to add greenery to indoor living spaces and begin or extend outside gardening, with sales fueled by plant collecting crazes and trends on social media. Simultaneously, the fast pace of development across the state is driving demand from landscape professionals and roadway authorities.

Growth in the green industry during a global health crisis might have been unpredictable, but all things being equal the sector has been expanding since taking a major hit in 2009 following the Global Financial Crisis. Overall, the sector's total impact (including indirect contributions) grew by \$10 billion, or 50%, since 2015 for an annual five-year growth rate above 9%. The growth in output has remained consistent, up 23% since the last economic impact study was conducted (by UF/IFAS) in 2018. Total output, as a measure, includes indirect and induced impacts from related aspects that keep the

industry running on a daily basis, examples like the necessary logistics apparatuses, trucking, insurance carriers, chemical and equipment manufacturers, and real estate, employment, marketing, and legal and professional services. Total "value added," a similar approximation to GDP, was \$16.4 billion in 2020 for the environmental horticulture industry as a whole, up 9% since 2018 and a whopping 1.5% of the state of Florida's total value-added product. Further contributing to the economy, the industry was responsible for an estimated \$609 million in local and state tax revenue in 2020, bolstering the communities in which its businesses thrive.

The largest segment of Florida's environmental horticulture by direct impact is landscaping, employing more than 121,000 people with \$11 billion in direct output between wages paid and value added. In second place by employment is greenhouse and nursery plant production with almost 24,000 employees and \$2.3 billion in direct output. Combined, retail garden centers and wholesale supplies operations in the green industry employed nearly 20,000 workers, and were responsible for slightly more direct output: \$2.5 billion. Overall, businesses in the environmental horticulture sector directly paid more than \$6 billion in wages and benefits to Florida workers in 2020.



TOTAL ECONOMIC IMPACT (INCLUDING INDIRECT AND INDUCED CONTRIBUTIONS IN \$M)										
Year	Employment	Labor Income	Value Added	Output						
2015	232,648	\$8,748	\$13,172	\$21,080						
2018	247,113	\$9,856	\$15,052	\$25,447						
2020	266,385	\$11,348	\$16,378	\$31,366						

Environmental Horticulture Segment 2020	Direct Cont		Total Economic Impact (Including Indirect and Induced Contributions in \$M)							
Industry	Employment	Labor Income	Employment	Labor Income	Value Added	Output	County Taxes	State Taxes		
Greenhouse & Nursery Production	23,935	\$806	42,087	\$1,697	\$2,551	\$4,797	\$38	\$91		
Lawn & garden equipment manufacturing	250	\$12	682	\$38	\$72	\$242	\$0	\$1		
Farm & Garden Equipment Merchant Wholesalers	3,237	\$212	7,860	\$463	\$838	\$1,476	\$27	\$62		
Nursery & Florist Merchant Wholesalers	6,656	\$306	10,072	\$486	\$731	\$1,123	\$29	\$67		
Lawn & Garden Equipment & Supplies Stores	7,194	\$264	11,942	\$506	\$986	\$1,643	\$52	\$119		
Florists	2,900	\$79	4,982	\$183	\$289	\$607	\$15	\$34		
Landscape Architectural Services	4,166	\$207	8,785	\$453	\$578	\$1,196	\$0	\$2		
Landscaping Services	116,862	\$4,118	179,975	\$7,521	\$10,334	\$20,282	\$14	\$56		
Total	165,200	\$6,003	266,385	\$11,348	\$16,378	\$31,366	\$176	\$433		

*Tax contributions of zero reflect impact of government tax rebates and/or subsidies.



The total Employment Contribution of Florida's Environmental Horticulture Industry for **2020** was over **266,000**.



The total Economic Impact of Florida's Environmental Horticulture Industry for **2020** was more than **\$31 billion**.



Florida's environmental horticulture businesses paid more than **\$600 million** in state and local taxes during **2020**.



Florida's environmental horticulture industry is growing at **9%** per year.



Florida produces **69%** of America's indoor foliage plants.



The total value of wages and benefits for Florida workers provided by the environmental horticulture industry was more than **\$11 billion** in **2020**.



Florida accounts for **24%** of total wholesale value of Floriculture production in the US.



TOTAL IMPORTS/EXPORTS

The US imported \$3.1 billion in nursery products in 2021, an increase of \$836 million (38%) from 2020 and more than double the \$1.48 billion imported in 2010. This number includes cut flowers, cuttings, and bare-root plants. While much of the dollar total is represented by fresh roses and cut flowers, more than \$174 million in foliage was imported in 2020. Top exporters to the US for nursery products excluding cut flowers are Canada, Colombia, the Netherlands, Ecuador, and Taiwan. Costa Rica and Mexico have also been increasing their respective share of the US market lately. Over the decade leading up to the Covid-19 pandemic, US imports of nursery products rose by an average of 4.7% annually. In 2020, however, imports stalled, increasing less than 0.5% for the year before skyrocketing in 2021.

On the exports side, Florida produced more than \$112 million worth of nursery goods that were shipped out of the country. The vast majority of this, nearly \$78 million, was unspecified live plants. For the decade leading up to the pandemic, the Sunshine State's export growth was increasing, on average, at 5.4% per year, though that dropped 2% in 2020. Canada, the Bahamas, the Netherlands and the Caribbean islands are the top export destinations for Florida nursery products.

THE TOP FIVE NURSERY, GREENHOUSE, AND RELATED PRODUCT SECTORS IMPORTED TO THE US ARE

- 1 ROSES
- 2 LIVE PLANTS (NOT OTHERWISE SPECIFIED)
- **3** CHRYSANTHEMUMS
- 4 DORMANT BULBS AND TUBERS
- **5** FOLIAGE

FOR THE STATE OF FLORIDA, THE TOP BROAD CATEGORIES OF IMPORTS ARE

- 1 ROSES
- 2 POM-POM CHRYSANTHEMUMS
- 3 UNROOTED CUTTINGS AND SLIPS OF PLANTS
- 4 STANDARD CARNATIONS
- **5** ALSTROFMERIA

TOP FIVE COUNTRIES FROM WHICH US IMPORTS NURSERY PRODUCTS

- 1 CANADA
- 2 COLOMBIA
- **3** THE NETHERLANDS
- 4 FCUADOR
- **5** TAIWAN

	TOTAL IMPORTS NURSERY PRODUCTS USA (IN \$1,000,000)												
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 20								2021					
1,483	1,547	1,621	1,678	1,728	1,735	1,856	1,957	2,091	2,231	2,224	3,060		



In the midst of global supply-chain breakdowns, ports across the country are making headlines. Prior to the pandemic, US imports of nursery-related products were trending 5% higher annually in dollar value. Florida's significant coastline is peppered with ports, albeit none as large or with the same capacity as those tending to dominate the news cycle (Los Angeles, Seattle, and New York). When it comes to top ports of entry for nursery products, however, the Sunshine State is by far the leader. US imports in the nursery products category were more than \$3 billion in 2021, and the Miami customs district (which includes multiple south Florida ports) registered 55% of the nation's total. The Tampa customs district (which encompasses the rest of the state) brought in an additional \$4.5 million in nursery-related goods, down substantially from \$6.7 million in 2019. While Tampa's total is significantly less comparatively, it was still more than twenty-seven of the fifty-eight US customs districts. Florida's ports consistently are the destination points for between 55-60% of all imported nursery goods. As port constraints make news across the country, Florida's increasing capacity is expected to draw attention from shippers across the globe. Deepening waterport projects in Jacksonville, Fort Lauderdale, Canaveral, and even possibly Tampa Bay are likely to drive more traffic, potentially expanding the state's share of green imports and exports.

FOR THE STATE OF FLORIDA, THE TOP BROAD CATEGORIES OF EXPORTS ARE

- 1 FOLIAGE
- 2 CUTTINGS AND SLIPS
- **3** BULBS, TUBERS (IN GROWTH)
- 4 ROSES (CUT, FRESH)
- **5** TREES, SHRUBS

TOP EXPORT DESTINATIONS FOR FLORIDA NURSERY PRODUCTS

- 1 CANADA
- **2** THE BAHAMAS
- 3 THE LEEWARD-WINDWARD ISLANDS
- 4 THE NETHERLANDS ANTILLES
- **5** TURKS AND CAICOS ISLANDS



Florida exported more than **\$90** million of live plants and foliage products in 2021.

Florida exported more than **\$2 million** of trees and shrubs in 2021.

Florida nursery and greenhouse product exports increased by **32%** from 2020 to 2021.

TOTAL EXPORTS FL NURSERY AND GREENHOUSE (IN \$1,000)												
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021								2021				
107,391	105,631	77,019	75,241	73,310	76,987	76,237	89,219	92,810	93,141	85,326	112,502	



TRENDS SHAPING THE INDUSTRY

1. Growth of Florida

It is often repeated that 1,000 people are moving to Florida every day. While impossible to track in real-time, the Florida Office of Economic and Demographic Research has forecast growth through 2040. Over the next five years (2021-26) the Sunshine State's population is expected to increase by nearly 1.5 million (to 23.42 million individuals), an average addition of 1.3% per year. This growth is more than double the rate forecast for the United States as a whole. Between births, deaths, and net in-migration the average is about 817 additional persons per day, but the rate of change is slowing annually. Deaths outpaced births for the first time in 2019-20, the result of an aging US population and Florida's popularity as a retirement hub. As this trend escalates, 100% of growth is expected to come from in-migration for the next twenty years.

These shifts have major implications for nursery, landscape, and allied industries. Growth means more homes and developments requiring landscaping and inputs. It means competition for land and water resources for growers. Potential lawn and landscape-related chemical usage expansion could be used as a weapon politically to push more regulations. More retirees in the state does not boost the availability of labor but does increase demand for goods and services. At the bottom-line, population growth results in greater competition for resources and political capital. Growth from in-migration will have diverse characteristics, bringing change and some volatility throughout the state. On the positive side, however, growth also brings opportunity, especially for those willing to take risks and navigate the future business, social, and political climates.

2. Water

Florida's population rise will continue to drive competition for resources, especially water. More neighborhoods and developments across the state bring increased political and financial capital with which to demand influence and access. Further, as drought and government regulation curtail water distribution in Western states, there is the possibility more growers may be drawn or driven to Florida. The result of this

is a greater number of stakeholders all fighting over the most necessary resource for life: water. Though the Sunshine State has enacted significant provisions defending growers, most recently the "Right to Farm" Act, activist lawmakers and local leaders continue to lead charges against the industry. A host of county and municipal governments recently have enacted or plan to enact regulations that limit runoff from fertilizer usage, especially on lawns and, possibly, golf courses as a response to algal blooms in sounds, bays, and springs. Aquifer replenishment and how to conduct this has been a topic in vogue as well. A multitude of challenges from various angles will continue to be waged against growers and landscape professionals including reduced irrigation allowances, local and county-level restrictions on runoff and discharge, reclamation projects, and more.

3. Pandemic

It has been nearly two years since news of a deadly virus causing lockdowns in China reached the front pages of American papers. Since then, the world (and especially the United States) has experienced unprecedented change. Nations closed their borders, major cities required citizens to stay in their houses and apartments, voting largely changed from in-person to by-mail, hand sanitizer is everywhere, and masks in public became mandated. Deaths related to Covid-19 in the US are greater than 926,000, with over 78 million positive cases. Reactions to the pandemic have caused major problems as restaurants shut doors, office buildings closed, transportation lines broke down, store shelves were emptied, and school children and college students learned via laptops at home. Initially, the hope was for "fifteen days to slow the spread," but inability to curtail the virus led to extended precautions followed by increasingly contagious mutations such as the Delta and Omicron variants. Even with proactive and reactive treatment options, Covid-19 continues to impact life on a daily basis. Negative economy-related externalities resulting from the pandemic and lockdowns greatly impacted FNGLA members, especially in relation to supply-chains, labor availability, and work from home.



4. Supply Chains

Globalization, in one form or another, has been at the height of political debate in the United States for quite some time. While offshoring of manufacturing has been a hot-button topic around supper tables and provided material for numerous country songs, generally the concern prior to Covid-19 was jobs. American shelves rarely lacked for goods to purchase, though those items likely originated in Southeast Asia or Central America. What changed with the pandemic is significant quantities of products were unavailable for purchase. In a country developing familiarity with "same-day" (or in some cases 1-hour) delivery, the notion of items being temporarily out-of-stock was a shock. Average consumers, naturally, were not the only individuals impacted: agricultural producers and retailers, especially members of FNGLA, faced monumental challenges in procuring articles to sell and the inputs to grow and manufacture output.

The phrase "supply chain" was virtually nonexistent in news titles until April 2021, peaking in popularity in September 2021 (at least since Google began keeping records in 2008). For many economists, journalists, politicians, and even business leaders, the knowledge or focus on how goods were produced and brought to market was unimportant, all that mattered was accessibility. With noticeable shortages across broad categories, many were scratching their heads as to what happened. Answering this question is no simple task, the problem has not been eradicated, logistics programs still face roadblocks and bottlenecks, but there were some contributing elements to the situation being faced.

"Just-in-time" or "lean" inventory management: Developed by Toyota, this widely implemented strategy aims to eliminate waste and lead time, procuring raw material and labor when required rather than investing in storage or building slack into the system. Unfortunately, the adverse effects of this include no margin for error and inability to meet unexpected orders. This method worked well-enough for decades, but in the unparalleled situation brought about by Covid-19, the lack of flexibility brought supply-chains to a screeching halt.

Global lockdowns: Put simply, goods cannot be consumed if they are not produced. For the first time in the modern era the globe shut down, "stuff" stopped being manufactured. Concurrently, bored people sitting at home wanted to buy those things not being produced. The immediate result of this was consumer shortages, which, in turn, was followed by a domino effect of producers lacking inputs.

Shifts in consumer preferences and unexpected demand: Lean inventory management relies heavily on forecasting, especially seasonal demand projections. With the developed world at home, purchases shifted away from services. Money people saved by not going out largely went to make up for those experiences. Workout products were demanded by those who could not go to the gym, sound systems and viewing equipment to make up for missing the movie theater, laptops and screens for working at home, and especially plants and gardening equipment. While these examples are all common products, what created shortages was the seasonally unexpected quantity of interest at the time when it occurred.

Backlogs at ports and transportation hubs: Once economies reopened, transportation of goods started in earnest. Overseas shipping, offloading, and delivering, previously a relatively smooth operating process, went from a consistent stream, to shutdown, to overload. Increases in vessel sizes over the years have resulted in fewer harbors that can unload large ships. Port congestion was likened to squeezing ten lanes of traffic into one. Exacerbating bottlenecks at ports, rail volume has been down and rising wages in other sectors have attracted truck drivers, causing offloaded inventory to stack-up at ports. America's reliance on imports coupled with significant setbacks in disbursement across the country has wreaked havoc on industries attempting to recover.

5. Labor Issues

During April and May of 2020, at the onset of the Covid-19 pandemic, a reduction of over 20 million jobs occurred, driving the unemployment rate temporarily to almost 15% nationwide.



Multiple rounds of stimulus checks were dispersed to subsidize workers staying home. As businesses reopened and "help wanted" signs returned to windows, millions of Americans decided they were uninterested in getting back to work. In December 2021, eighteen months later, the employment pool remained 2.5 million persons below its pre-pandemic total, 1.7% of the labor force had not returned. Currently, the United States finds itself in a major worker shortage, especially in manual labor, which makes up the majority of workers in the nursery, landscape, and wholesale/retail establishments. A multitude of factors have contributed to this including the cost of childcare, increased savings from reduced consumption during lockdowns, low wages offered for jobs, a jump in boomer retirements, stimulus payments, and more. For whatever reason, a sizable percentage of those qualified to work are choosing not to do so. Further, migrations to new locales over the past year and a half have resulted in skills imbalances in some regions.

Hiring and maintaining a company's labor force has always been difficult in the nursery/landscape segments, but the current shortage has taken this to another magnitude. Entry-level wages for some firms have increased from \$12/hr to \$18/ hr or higher, a jump of 33% in hourly costs. Contact-tracing guidelines requiring two-week quarantine intervals for those exposed to the virus have strained availability of those workers on payroll and willing to show-up. Wage-floors being set by big-box and online retail logistics arms coupled with generous sign-on bonuses have provided steep competition for familyowned small businesses. Many jobs in the environmental horticulture industry are strenuous, entailing work outside in direct sunlight or hot greenhouses, detractors for some job seekers (as well as reducing the pool of potential employees who can handle the tasks). Further exacerbating the quandary, there is no end in sight to resolving labor issues, including H-2A agricultural guestworker visas and the H-2B non-ag seasonal worker visas, as Congressional negotiations remain at an impasse. Across the country, every industry is struggling to fill labor gaps, nursery and landscape included. Imbalances persist regionally and across skills gaps, with record quit rates and inability of employees to procure housing further encumbering businesses. Creative forms of compensation and innovative hiring processes will be necessary in the future for firms across nursery/landscape sectors to compete for labor.

6. Work From Home

Prior to the pandemic, less than 10% of American employees were primarily remote workers. By May 2020, two months into lockdowns, 69% of employees polled worked solely or partially from home. Spending more time in their houses than ever before, many decided it was time to beautify their surroundings with live plants, indoors and outdoors. According to the 2021 National Gardening Survey released in April, more than 18 million new gardeners were added to US ranks over the pandemic. Sales of plants and equipment at retail garden centers skyrocketed in 2020 and the craze continued into 2021, driven by online viral marketing campaigns on TikTok, listings on e-commerce sites like Etsy, and driven by ideas posted on Pinterest. Collecting specialty flora may be somewhat of a fad, and it is likely the rate at which consumers have been purchasing new plants will slow, but a newfound appreciation for gardening is here to stay. In September 2021, 45% of Americans were still working from home at least parttime. Purchasing patterns and consumptive choices have shifted as living and working arrangements are likely forever changed for a sizable portion of the American population. Further, as the percentage share of remote jobs increases (by nature more desirable for some), an impact on the availability of labor for nursery, landscape, and brick-and-mortar retail operations will be noticed.



LABOR SHORTAGE



LANDSCAPE

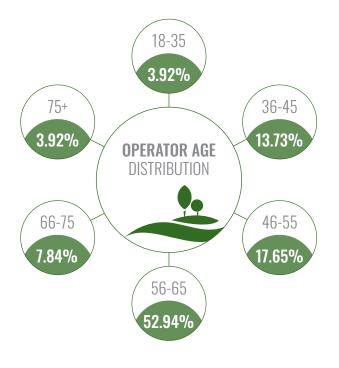


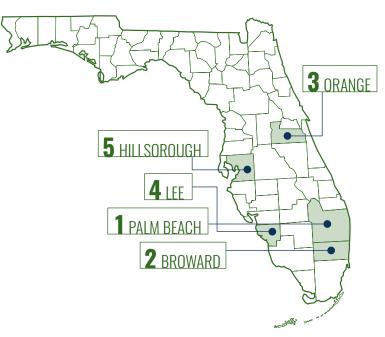
Landscape firms are essential to the foundation of Florida's infrastructure. Who planted the palms around retention ponds as cars exit the new Turnpike off-ramps? How do the green spaces in downtowns stay so nicely trimmed? Someone had to sculpt the Mickey topiary at Disney's Hollywood Studios. FNGLA's landscape member firms service a multitude of location types from housing developments to tourism sites to government properties and everything in-between. Some landscape companies specialize in high-end neighborhoods cutting each shrub by hand without power equipment while others maintain large commercial spaces. Split into three sectors (architecture/design, installation, and maintenance) the hard work of landscaping employees is evident throughout the Sunshine State. While landscaping may go unnoticed by some due to the mundane of the daily grind or hustle-and-bustle, the absence of its maintenance is glaringly apparent.

Florida's landscape industry is mature, with companies surveyed having been in business on average for 21 years and for as long as 62 years. More than 70% of owner/operators are between the ages of 46 and 65, with nearly 12% age 66 or older. Compared with age trends in the agricultural industry, only about 4% of landscape company owners are under age 35, a significantly smaller portion than the percentage of young farmers (around 8%). Women-owned businesses have strong representation in the landscape sector, accounting for 41% of firms polled.

AGE OF OPERATOR

TOP LANDSCAPE COUNTIES FOR FLORIDA





Size composition for landscape is diverse, ranging from sole proprietorships to over 3,000 full and part-time employees. Operations polled average 72 full-time and 13 part-time employees. Total sales by firm in 2020 differ significantly as well, from less than \$100,000 to more than \$50 million. Firms surveyed are most likely to be between \$1-5 million in sales, or under \$100,000. Most firms gear themselves towards servicing specific sectors, with 42% of firms focusing primarily on commercial and 36% on residential

Florida's landscape sector is highly state-centric, with less than 1/10th of the services provided occurring outside the state. On average, 86% of landscaping sales are local, within 50 miles of the business headquarters. The majority of operations offer Florida-friendly and native varieties, and one-quarter provide plant education services.

Despite the pandemic, 56% of landscape firms surveyed experienced an increase in sales in 2020, with only 27% reporting a decrease. Looking forward, over the next three years 80% of companies expect sales to increase. To prepare for this growth, landscaping operations are planning to invest, on average, \$167,000 in the upcoming year on equipment. Currently, the top perceived threat continues to be the prolonged impact of the Covid-19 pandemic, followed closely by labor availability, low worker education and training, increasing costs of production, and general economic conditions.

THE TOP FIVE RATED THREATS TO THE LANDSCAPE INDUSTRY



1

Prolonged Impact of Covid-19 Pandemic



2

Increasing Costs of Production / Inflation



3

Low Worker Education, Training, or Skills



Labor Availability



General Economic
Conditions

TIME IN BUSINESS







56% of landscaping firms experienced an increase in sales, **27%** reported a decrease, and **17%** experienced no change.

LANDSCAPE



INDUSTRY SPOTLIGHT

SHAWN THOMAS, PRESIDENT, SABAL LANDSCAPE SOLUTIONS | JACKSONVILLE, FL

What motivated you to enter the landscape industry and how long have you been in it?

I knew what I wanted to do at about eight years old: for Christmas as a kid I was asking for lawn equipment. The green industry has been a lifelong passion for me and I've been professionally working in the business around 20 years, since college.

Who is your primary target market?

We market ourselves as an elite gardening service. Our target market is high-end residential, predominately on water. The overwhelming majority of the business is on the intercoastal, river, or the coast.

How has the industry changed since you have been in business?

Regulations have gone crazy compared to 20 years ago whether that's water or fertilizer or even employment. Government interference overall has increased dramatically.

What are the biggest challenges you have faced in the past?

Labor has always been the number one problem in the landscape industry. People would ask precovid what are top three issues are and we would say: first is labor, the second is labor, and number three is labor. Regulation has been a challenge as stated. Water is becoming and will be a major issue. We are running out of water here with how many people are moving to the state.

How has the pandemic impacted your business and the industry?

Labor is just not there. Any form of employees is very difficult to find, even at the management levels. Allied supplies are becoming harder and harder to find. Plants for the most part are there, but trailers, trucks, fertilizer, equipment is all hard to come by. You cannot find certain trucks in the USA - we had to settle recently for a less desirable model just to get a truck and it was nearly \$20k over normal list price. Labor and allied supplies are a huge problem. To make things worse, prices on what we can buy have surged. Plastic costs, for example, are through the roof.

What challenges do you expect to encounter going forward?

Water is a big deal going forward, specifically the consumption of it and the potential for access to be curtailed. Government regulation, such as fertilizer bans, will continue to pose a challenge, especially at the city level. Rulemaking in many local areas is not science based and comes down on businesses, such as a recent potassium ban in one locale. As a company owner I'm not going to spend money putting down too much of a fertilizer or pesticide.

What opportunities do you see on the horizon for your business/industry?

The sky is the limit right now in the landscape business. Every aspect of it right now has potential that seems limitless. With the way construction and development growth is going you can pretty much write yourself a blank check for whatever you want to do.

What is your favorite aspect or memory from working in the landscape business?

Sense of accomplishment. Whenever we do the things whether on the gardening, maintenance, or design side you can visibly see it, the beautification of making a landscape better. The community sees it, the homeowner sees it, everyone observes a change in scenery for the better.



SHAWN THOMAS SABAL LANDSCAPE SOLUTIONS



FOLIAGE



Florida is the number one producer of indoor foliage products in the country, producing nearly 69% of total wholesale value for the United States. Primarily located in the southeastern counties of Miami-Dade and Palm Beach and along the I-4 corridor (Apopka area) of Lake and Orange counties, FNGLA represents all sorts of tropical foliage and indoor houseplant operations. These growers produce hundreds of plant varieties (primarily in greenhouses and shade houses), including bromeliads, Tillandsia, Philodendron, ivy, Pothos, succulents, Dieffenbachia, crotons, and everything in-between. While the positive benefits of indoor flora such as air-purification, de-humidification, and all-around attractiveness have been widely known for some time, the pandemic instigated new surges of interest as time spent in the home drastically increased, effectively overnight.

Florida's foliage industry, while embedded in the state's economy for more than a century, is dominated by firms less than fifty years old. Half of respondents started their firms between thirty and forty-five years ago, while the median time in business is 31 years (with an average of 29). Almost 80% of foliage companies polled are run by owner/operators who are 56 years old or more, noticeably higher than agricultural producers in general. Women own and operate 35% of foliage businesses in the Sunshine State. Total wholesale value of indoor foliage plant production in Florida for 2020 was \$519 million, up 14% from 2019 according to USDA.

Most producers in the foliage sector run family-owned small businesses, employing an average of twenty-eight persons. The overwhelming majority of growers have fewer than 50 workers, skewing the median number of jobs to thirteen per firm. More than 75% of respondents reported sales of less than \$5 million last year, reflecting the typical scope of the enterprises. Greenhouses and shade houses are most

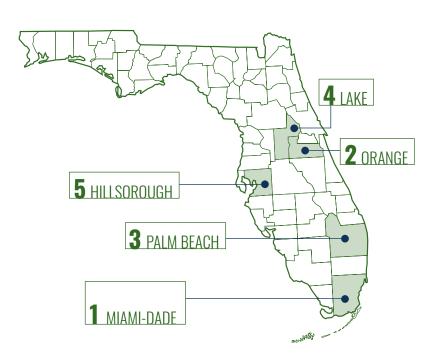




Total wholesale value of indoor foliage plant production in Florida for 2020 was **\$519 million.**

Wholesale value of foliage production in Florida was up **14%** from 2019.

TOP FIVE NURSERY/ GREENHOUSE COUNTIES IN FLORIDA



commonly utilized for foliage production, with a wide range of total company square footage from less than 10,000 square feet to 2 million square feet. Greenhouse and shade house areas are normally distributed across various sized nursery operations. Though foliage is primarily grown indoors, some large outdoor production does take place in nursery operations up to 50 acres in size.

Demand for greenery across the United States, especially indoor houseplants, jumped in spring 2020 after most everyone went to work-from-home. A portion of the Florida foliage industry is geared towards local retail sales, but mass merchandise stores, independent garden centers, wholesalers, and other nurseries are the dominant target markets. With the bulk of foliage revenue coming from sales headed outside the state of Florida (only about 25% of sales to customers inside the state on average), the industry continued to benefit as pandemic lockdowns persisted in many locales. Purchases across most customer types were higher, but demand from landscapers, interiorscapers, and government agencies was mixed. Over 95% of growers, however, reported increased sales for tropical foliage and indoor houseplants. Potted flowering plants, bedding plants, and palms all experienced growth in consumer interest.

Looking forward to the next 1-3 years, Florida's foliage growers are overwhelmingly positive and sales are expected to increase across all customer sectors. In preparation for this, producers have been ramping up capital investments, especially in buildings/structures, equipment, and vehicles. The sizzling Florida real estate market does seem to have tempered some expansion plans in regards to land purchases, but foliage growers are intending to spend, on average, more than \$275,000 on adding or improving buildings and structures, as well as \$130,000 on vehicles and equipment. While some consumer demand is expected to taper in the next few years, overall Florida's foliage industry remains poised for growth, and its industry participants optimistic.

TOP FIVE ISSUES FOR FOLIAGE OPERATIONS



Labor Availability



Increasing Costs of Production / Inflation



3

Prolonged Impact of Covid-19 Pandemic



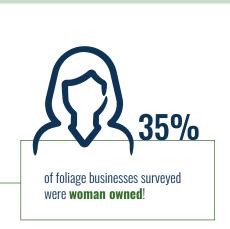
General Economic Conditions



Supply-chain Disruptions / Input Procurement

TIME IN BUSINESS







56% of landscaping firms experienced an increase in sales, **27%** reported a decrease, and **17%** experienced no-change.

FOLIAGE



INDUSTRY SPOTLIGHT

MATT ROBERTS, CENTRAL FLORIDA FERNS AND FOLIAGE | ZELLWOOD, ORANGE COUNTY, FL

What motivated you to enter the foliage industry and how long have you been in it?

My motivation to move to this industry was to continue and sustain the success my parents had building this company. [Central Florida Ferns and Foliage was established in 1990]

Who is your primary target market?

Independent Garden Centers, Plant Shops & Re-wholesalers.

How has the industry changed since you have been in business?

A lot of growth from our "smaller" markets (Plant Shops & Online Retailers).

What are the biggest challenges you have faced in the past?

Labor as always, but more recently supply chain shortages in pots & soils. Never had those issues before.

How has the pandemic impacted your business and the industry?

It has exponentially grown our business. Hard to say that knowing so many people have been negatively affected by COVID.

What challenges do you expect to encounter going forward?

More labor issues & supply chain issues, but I think increased water regulations are something Florida Ag/Hort will see sometime in the future.

What opportunities do you see on the horizon for your business/industry?

For us personally, I see a lot of opportunity in expanding our product line as well as continued expansion on our facilities and staff. We are proud of what we grow and finding new and exciting things to add to that is always a challenge, but a very unique opportunity.

What is your favorite aspect or memory from working in the foliage business?

My favorite memories in this industry when I look back are of working summers and afternoons for my parents after school or during summer. At the time I hated it, but looking back it laid a foundation for my character and how I approach this business at this time.



MATT ROBERTS CENTRAL FLORIDA FERNS AND FOLIAGE



WOODY



Trees provide enormous benefits to their surroundings including filtering carbon monoxide, producing oxygen, giving shade, offering habitat for animals, blocking unsightly views, muffling noise, and especially beautification. While the state of Florida is home to significant swathes of forest and tree cover, managed land and developments necessitate additional arboriculture. FNGLA represents more than 200 nurseries growing trees and shrubs which fall under its "woody" category across the state. These businesses cultivate the magnolias and palms lining roadways, live oaks in office parking lots, Podocarpus and Ligustrum in housing developments, the crape myrtle and red maple in the neighbor's back yard, and everything in-between.

The median age of Florida's woody shrub and tree producing businesses is 30 years, and its average is 32 years, reflecting maturity and longevity for the sector. It is not uncommon to find firms which have been in action for 40, 50, or 60 years, with some in existence dating back to the 1880s. About 70% of owner/proprietors are more than 55 years old, skewing this cohort more towards retirement age than the average farmer (around 60% of all agricultural operators are 55+). Less than 10% of those surveyed were under age 45, reflecting a wide gap in ownership and management that will need to be crossed in transitions occurring over the next decade. Women-owned nurseries account for nearly 25% of the woody shrub and tree category.

While there is diversity in the size and scope across this sector, more of these nurseries throughout the state are family-owned small businesses. The median number of full-time employees in the woody category is 30 (average of 32), with nearly 94% employing fewer than 100 individuals. Most commonly, firm sales are between \$1-2.5 million or \$5-10 million, with 80% of gross revenues \$10 million or less. Types of growing in the woody category differ as well, with greenhouse, shade house, outdoor container, and in-ground field production areas all utilized. Most apply a combination of these methods in their business production strategies, especially those vertically integrated starting their own seedlings and



The median age of Florida's woody shrub and tree producing businesses is **30 years**, and its average is **32 years**. Some firms have been in operation nearly

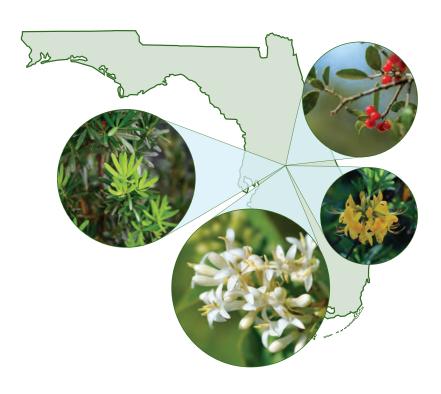
140 years!



On average, businesses in the woody sector employ **32 workers**, with a median of **24 workers**, but some have nearly

200 on staff

POPULAR FLORIDA TREES & SHRUBS



liners (requiring protection in shade or closed environments). As a result, reported greenhouse space is almost entirely less than 50,000 square feet per grower. Outdoor container production is evenly distributed across sizes ranging from 5 acres to more than 100 acres. In-ground field production, on the other hand, is dominated by (but entirely not limited to) those growing on over 100 acres.

Sales in the woody sector are spread in a regionally diverse fashion, with firms specializing in singularly local markets, some split evenly across the state and nation, and others primarily deriving sales revenue from outside of Florida, even internationally. Target markets are also varied, but the largest customers by sales were landscape firms, accounting for 60% or more of nearly half of surveyed firms' sales in the woody category. Retail garden centers, while generally a smaller percentage of woody sales revenue, are consistent buyers for virtually all respondents.

Over the course of 2020, while most growers reported an increase in tree sales, nearly one-third did not experience a noticeable change from 2019. More than 80% of those selling shrubs, however, saw sales rise. Looking forward, 74% of growers expect tree sales to expand over the next 1-3 years, and more than 62% foresee more shrubs sold. Overwhelmingly producers are optimistic about future sales, with less than 5% of responders expecting drops. Many businesses took the opportunity to expand operations last year, with significant boosts to purchases of land, buildings, and equipment. On average, firms spent \$170,000 on buildings/structures and more than \$200,000 on equipment and vehicles. With real estate prices in Florida reaching record highs, the woody sector has not been immune to those shocks. Over the next 1-3 years, only about 16% of respondents intend to invest in land purchases, instead planning to shift resources towards buildings and equipment. The woody shrub and tree industry segment remains poised for growth, and growers' intentions to continue investing over the next few years evidences optimism.

TOP FIVE THREATS FOR BUSINESSES IN THE WOODY SECTOR



Increasing Costs of Production / Inflation



General Economic Conditions



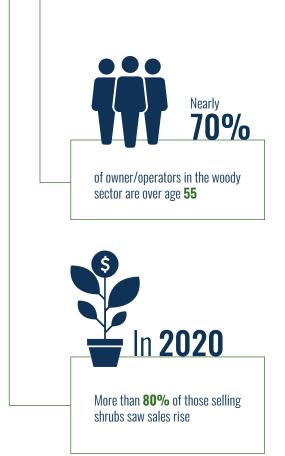
Prolonged Impact of Covid-19 Pandemic



Labor Availability



Supply-chain Disruptions / Input Procurement



INDUSTRY SPOTLIGHT

ROBERT SHARP, SHARP TREE FARM | FLORAL CITY, CITRUS COUNTY, FL

What motivated you to enter the woody industry and how long have you been in it?

After retiring from AAA Auto Club South as president/CEO and then Chairman of the Board with 57 years of service, I told my wife I didn't want to compete with her in the kitchen as she was great. So, I wasn't ready to truly retire and with that in mind I ventured into the agricultural industry. That was the birth of Sharp Tree Farm and Nursery nineteen years ago, along with RR Sharp Properties, LLC. You need to know when I made that decision the agricultural industry was the second largest and fastest growing industry in Florida. It's been a real challenge experiencing recession, inflation, real estate ups/downs, coronavirus, shortage of supplies, major price increases, hurricanes, and immigration issues just to name a few, but worth the investment without a doubt.

Who is your primary target market?

We are primarily a wholesale tree farm targeting developers, city municipalities, landscapers and tree farms both within and outside the state of Florida, and dealing with a number of brokers in a large market space. However, we are one of a very few wholesalers also selling to residents/homeowners in a four-county area around our Citrus County location. From the beginning I felt it was important to make friends with and sell to the homeowners in our area; these neighbors love visiting Sharp Tree Farm and have become one of our greatest sources of marketing, helping to "spread the word."

How has the industry changed since you have been in business?

We are very fortunate to be living in Florida...who doesn't want to live in the Sunshine State? Despite the pandemic, Florida continues to grow at the rate of as many as 1,000 people a day, making us the most moved-to state in 2020. After all, who wants to be living in freezing type weather? While Covid has changed some of the ways we do business and economic challenges like inflation can't be ignored, I see continued growth in our Florida marketplace with unlimited opportunities.

What are the biggest challenges you have faced in the past?

I will say that going from leading a large corporation to becoming an entrepreneur launching a tree farm start-up was a bit of a culture shock, but thanks to supportive and helpful friends, Sharp Tree Farm not only survived, but has thrived! That said, the industry did take a major hit during the 2008-2010 recession, as did many small businesses. Looking at the big picture, Mother Nature is always a concern, whether hurricanes, tornadoes, wind, lightning, or flooding. But those things aren't new, and we can deal with them. Employment, with wage issues and staffing concerns in the midst of Covid, continue to be a challenge as we look to the near future. And I always have a major concern about changes that might come our way from the Florida legislature and Congress. A special thanks to our Ben Bolusky and his professional team who stay on top of and act to influence important policy decisions on behalf of our industry. Finally, price increases in every facet of our business create a never-ending challenge for all of us and our P&Ls.



BOB SHARP SHARP TREE FARM

How has the pandemic impacted your business and the industry?

It's had its ups and downs, not only the impacts we've seen to our society as a whole, but to certain industries and business models, in particular. Just look at the hospitality industry in general and the cruise lines, specifically. The big benefit to our operation is that most everything takes place in the open outdoors and fresh air. While I am concerned that we are going to see different types of viruses for a long time to come, we've survived and even thrived by adapting and being nimble and must continue to do so.

What challenges do you expect to encounter going forward?

Whether due to the pandemic or not, rising costs of supplies, insurance, taxes, and the list goes on, will always be a challenge, as will dealing with all that Mother Nature sends our way. As previously mentioned, policy decisions made by Congress and the Florida legislature can often have either intended or unintended short- or long-term consequences for our industry. We need to ensure that the excellent representation provided by Ben Bolusky and his team continues and provide financial and other support as needed. Ben's are big shoes to fill, and future leadership is key to our continued success. Finally, employees' hourly wages and creating a stable workforce will live on as a challenge to our industry and many others.

What opportunities do you see on the horizon for your business/industry?

As previously mentioned, and at a high level, forward movement of the Florida economy, influx of new industry and residents, along with mild storm seasons will set the stage for continued success. At the operational level, I think consolidations, mergers and joint ventures – perhaps economy-driven – may provide significant opportunities for small to medium size tree farms. I know how much I enjoy working with, and appreciate learning from, the successful large farms that have been in business for a long time! Our industry looks positive for the future and will continue to offer exciting opportunities for both owners and employees. For Sharp Tree Farm in particular, we can't grow our patented SkyClimber Oak Trees fast enough to keep up with demand, which is both a challenge and an opportunity. Popularity for the SkyClimber has continued to grow since Adam Cannon and I developed it 9 years ago, and we plan to leverage that opportunity.

What is your favorite aspect or memory from working in the woody business?

Most of all, the great friendships that have developed, and the helpful business associates who are willing to nurture our industry in the present and make it "bigger and better" in the future. My personal thanks to Stoney Maddox, Adam Cannon and Jim Huntsman for their advice and counsel along this challenging but rewarding road. I am so proud to be a part of this industry, and can't think of a more rewarding "second career."



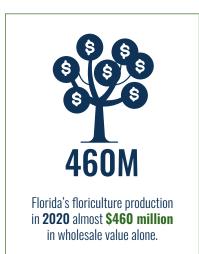
their flowers or showy leaves."

FLORICULTURE



It might not be surprising that the state deriving its name from flowers would be famous for commercially growing them. Numerous festivals across the state celebrate hibiscuses, orchids, wildflowers, and gardening, not to mention the world-famous Epcot International Flower and Garden Festival. While the member businesses of this FNGLA division may be fewer than other categories, they carry their weight in terms of revenue generation. According to the USDA, Florida's floriculture production in 2020 was up to almost \$460 million in wholesale value alone.

Flowering plant producers, on average in the state, have been in business for 44 years and nearly 50% of operations are more than 50 years old. The overwhelming majority of growers and operators themselves are 56 years old or more, with a noticeable lack of owners under age 45. While floriculture operations are scattered across the state, most are located south of Ocala. The average number of employees per business is skewed by a few very large operations, but most have less than 50, with a median of 29 full-time workers. Primarily small businesses, sales revenue across the sector is diverse, ranging from \$250,000 to \$30 million per year. Floriculture operations are generally conducted in greenhouses and/or shade houses and sometimes in combination with outdoor container or (least likely) field production. Shade house area is consistently between 200,000 and 500,000 square feet, with greenhouse spaces ranging from 50,000 square feet to more than 1 million square feet.





Like most "green" sectors across the state, floriculture demand flourished during the pandemic. Growers across the board experienced increased sales for tropical and indoor plants, as well as potted flowering and bedding plants. Product destinations differ widely, some stay entirely local or within the state, while some growers almost exclusively focus on sales outside the state of Florida. Of all growing types within FNGLA's membership and the industry-at-large, floriculture operations are most likely to export plants, with 10-20% of revenues commonly derived from international markets.

Optimism abounds in floriculture regarding the expansion of business, with large investments in buildings and structures, equipment, and vehicles planned over the next few years. While some purchases were made last year in the land category, growers now are focused on upgrading existing and building new facilities, more so than contending in Florida's challenging real estate market. Overall, growers are positive and project sales strength for floriculture over the next few years, but their expectations remain slightly more measured than some other sectors.

TOP FIVE THREATS FOR FLORICULTURE PRODUCERS



1

Supply-chain Disruptions / Input Procurement



2

Increasing Costs of Production / Inflation



2

Prolonged Impact of Covid-19 Pandemic



Τ.

Labor Availability



5

Irrigation / Water Availability Restrictions



of sales revenue comes from exports.

INDUSTRY SPOTLIGHT

BRAD BETHERUM, BRAD'S BEDDING PLANTS, INC | DELRAY BEACH, PALM BEACH COUNTY, FL

What motivated you to enter the floriculture industry and how long have you been in it?

Well, I worked at a Kmart garden center in Deerfield Beach at 18 years old and then Home Depot at their garden center. I started growing annuals in the backyard as a hobby and did not contemplate growing plants for a living. My hobby turned into a business in 1987.

Who is your primary target market?

Commercial landscapers, small garden centers, theme parks, and contract growing for northern market growers for big box stores.

How has the industry changed since you have been in business?

Labor has been a huge factor and as we move forward we are investing in automation. As much as I don't like social media it has helped with marketing I believe. Things are just more complicated today.

What are the biggest challenges you have faced in the past?

Finding good people in the industry.

How has the pandemic impacted your business and the industry?

Again finding employees. Inflation is now a major problem and getting supplies is now impossible, it seems.

What challenges do you expect to encounter going forward?

Inflation and worrying about a major recession. Labor and supplies as well.

What opportunities do you see on the horizon for your business/industry?

We have been diversifying yet streamlining what we grow. We do a lot of contract growing in the early spring which helps keep labor from leaving or letting them go in an off-season. We are getting noticed out of state more and more every year and the tradeshows induced most of that.

What is your favorite aspect or memory from working in the (enter sector) business?

I love what I do and still have the passion to grow the best annuals that I can. I have quite a few people that have been working for the company for more than 10-20 years and most share the same feelings. We all work as a team and we strive to be best in quality and customer service. We have actual people that answer our phones and get the customers the info they need very quickly.



BRAD BETHERUM BRAD'S BEDDING PLANTS, INC



Producers of starters and young citrus trees primarily for commercial growers and also consumers/retail establishments.

CITRUS NURSERY



One word to describe the Florida citrus industry might be "resilient." Over the last 150 years of fruit cultivation in the state, citrus tree producers have weathered a multitude of freezes and hurricanes, canker, stem-pitting (tristeza virus), and are now fighting greening. Integral to Florida's citrus-growing longevity are nurseries. In 1953 the state implemented a voluntary budwood program intending "to assist growers and nurserymen in the production of horticulturally superior citrus nursery stock that is believed to be free of viruses and other graft-transmissible diseases." Florida's Division of Plant Industry oversees inspectors who conduct monthly nursery visits. Nursery-produced trees are grown from "increase" trees, which are derived from either foundation trees or scion trees, which the state's Bureau of Budwood Registration manages. Originally involvement was voluntary for growers, but the state began requiring full participation in 1997 as disease issues persisted. At its peak in 1960, there were 1,428 citrus nurseries across the state, but by the end of the decade the total fell to 307 (though the number of propagations conducted nearly doubled). Now, 37 citrus nurseries conduct around 4 million propagations per year (a multi-year record 4.8 million in 2020), producing young trees which refresh groves and find placement in neighborhood landscapes and sunrooms.

The citrus nursery business itself in Florida may be more than 150 years old, but consolidation resulting from increased budwood program implementation and regulation as well as industry shrink have changed firm demographics. Median nursery age currently is 14 years, with an average of 21 years, highlighting a mixture of businesses which have survived decades of hardship along with younger startups beginning after the discovery of greening. Owner/operators, however, are almost entirely over the age of 45. The majority of citrus nurseries are situated close to their prospective customers in the south-central region, especially Polk, Highlands, Desoto, and Hardee counties. Primarily a "small-

TOTAL NUMBER OF NURSERIES IN FLORIDA

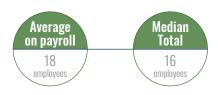
37

TIME IN BUSINESS



EMPLOYEES

Each firm has



business" undertaking, each firm, on average, has 18 employees on payroll, with a median total of 16. The range, however, is diverse from "mom and pop" operations on up to 50-person workforces. The majority of nurseries fall between \$1-2.5 million in annual sales, but there are outliers on either side of this range. In order to protect from pests and disease, citrus nursery operations are conducted entirely within enclosed greenhouses or shade houses, with total indoor growing space generally between 50,000 and 200,000 square feet.

While other FNGLA industry sectors experienced booming sales over the course of the pandemic, expansion in the citrus nursery sector was more muted. Sales did increase for many, with upticks in demand from homeowners, re-wholesalers, horticultural distribution centers, and independent retail garden centers yet they were mixed in other categories, especially to other nursery and greenhouse growers. The target market for most producers is close to home and within Florida, but there is demand from outside the state and abroad. While most product remains in-state, nursery growers are not monolithic in their marketing, selling to a diverse set of customers and regions.

Going forward, citrus nursery growers are concerned about many of the same risks as others in the nursery industry, specifically labor shortages, the prolonged impact of Covid-19, increasing costs of production, and general economic conditions. Expectations for the next 1-3 years are mixed, some expect increased sales, more are prepared for "no change," and a few forecasting decreases. External variables including climate, the proliferation of diseases (especially greening), rising land prices, increased development, and less expensive fruit imports will add more pressure on citrus nursery growers in the future.

TOP FIVE THREATS FOR CITRUS NURSERY OPERATORS



Labor Availability



General Economic
Conditions



Increasing Costs of Production / Inflation



Prolonged Impact of Covid-19 Pandemic



Supply-chain Disruptions / Input Procurement

CITRUS PLANTINGS & PROPAGATIONS

	2012	2013	2014	2015	2016	2017	2018	2019
Total Plantings Citrus	975	1.525	1.634	1,329	1.811	1.877	1.454	1.086
(in 1,000 trees)		.,	.,	.,	1,211	.,	,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

	2014	2015	2016	2017	2018	2019	2020
Total Citrus Propagations	4,712,439	4,438,128	4,344,446	3,572,797	3,971,662	3,933,815	4,825,343

CITRUS NURSERY



INDUSTRY SPOTLIGHT

NATE JAMESON, BRITELEAF CITRUS NURSERY | LAKE PANASOFFKEE, SUMTER COUNTY, FL

What motivated you to enter the citrus nursery industry and how long have you been in it?

We've been in the citrus nursery business since 1998. We (my wife and I) both come from agricultural families. We wanted to farm for ourselves, but had relatively limited resources. The citrus nursery was an opportunity to start on a small scale and add on over time. I would have liked to have been a citrus grower, but didn't have the land or the resources. The next best thing was a citrus nursery.

Who is your primary target market?

We contract grow for the commercial citrus industry, we grow for garden centers around the US and we also have an online business selling to individual homeowners.

How has the industry changed since you have been in business?

The industry has changed significantly since we started. When we began, nurseries were outside, field nurseries. Due to the spread of citrus canker and HLB, in 2007, it was mandated by state rule 5B-62 that all citrus nursery trees in FL would be propagated in a protected culture system.

What are the biggest challenges you have faced in the past?

We have faced depressed prices, government regulations that required significant investment and we are currently facing labor shortages in combination with increasing input costs and supply chain interruptions. Like all agricultural crops, every year comes with a new set of challenges.

How has the pandemic impacted your business and the industry?

The pandemic has impacted us with labor disruptions. It is very hard to find workers for our industry.

What challenges do you expect to encounter going forward?

Increasing labor and supply costs. Decreasing labor availability.

What opportunities do you see on the horizon for your business/industry?

There are opportunities to adopt automation and new technologies as a way to stay competitive in the market place.

What is your favorite aspect or memory from working in the (enter sector) business? Building lasting friendships and relationships with others in the industry.



ANNA AND NATE JAMESON BRITELEAF CITRUS NURSERY



GARDEN CENTER



Where is the starting place for a suburbanite who develops a green thumb? While an online search engine might be the first stop on the way to a personal arboretum, the neighborhood garden center is a great place to begin. Weather and climate in the Sunshine State can be finicky, so knowledge of the region's eccentricities is necessary for successful gardening. FNGLA's member garden centers provide much-needed support and advice for consumers, with more than 90% offering Florida-friendly and native plants, along with pollinator attractors, alternative cultivars to invasive species, and informative plant identification. These local businesses serve everyone, from the beginning gardener to the experienced botanist to landscape professionals needing a specific plant or a tool in a pinch.

Florida's retail garden centers are both mature and diverse in longevity. Seeds, plants, tools, nutrients, and more have been sold in general stores since Florida's earliest days as an agrarian society, but shops dedicated to more recreational gardening are a newer phenomenon. The average (and median) age of FNGLA's member garden centers is 34 years, with time in business ranging from recent startups to more than 80 years. While most producer ages skew closer towards retirement, garden center proprietors are more evenly distributed, with around half at 45 years old or younger. The businesses are located all over the state, but especially adjacent to population centers. Some utilize greenhouses, shade houses, outdoor container and field production areas, or a combination. Sales are highly localized, with 90% of firms identifying all or nearly all of their customers being within a 50-mile radius. Revenues fluctuate significantly depending on size and location, with some under \$250,000 and up to \$15 million. On average, each location employs fourteen full-time staff and six part-time workers.

Over the course of the pandemic, retail garden centers received renewed interest as consumers spent more time at home, desiring indoor plants to decorate new workspaces and updated landscaping for yards which may have otherwise been noticed only on the weekends. Almost all garden centers reported increased sales to homeowners and individual consumers in 2020. Sales to developers and government agencies were mostly strong, but firms experienced mixed levels of demand from landscapers, interiorscapers, and commercial establishments (such as restaurants and hotels). Going forward the next 1-3 years, more than 90% of garden center owners expect sales in the consumer segment to continue growing. As the economy reopens, industry leaders are optimistic that the industries which suffered from lockdowns (such as hotels and restaurants) are poised for recovery. Garden centers continue to face challenges, however, especially Covid-19's prolonged impact on supply-chains. Such disruptions are weighing on this retail-dominated sector, as are increasing costs of goods. Labor availability and rising costs of doing business, such as business insurance and healthcare, are also concerns. Overall though, while garden centers face challenges, the proprietors' outlook across the sector remains optimistic with significant growth potential.



GARDEN CENTER



INDUSTRY SPOTLIGHT

LIZ LARK-RILEY, ROCKLEDGE GARDENS | ROCKLEDGE, BREVARD COUNTY FL

What motivated you to enter the garden center industry and how long have you been in it?

I have an unconventional background for someone in horticulture. My degrees are in theater and arts administration and I started in the green industry developing Rockledge Gardens' Events and Marketing Department. For me it started as a part-time job, working for my in-laws while my husband and I focused on building a theater company on the side. Gradually, working for Rockledge Gardens became something more as my passion grew, not only a passion for all things green and growing, but for community-building and creating a workplace that's supportive, challenging, and fun. I transitioned into my current role as Managing Director in July 2019. I've been working for Rockledge Gardens for eight and a half years.

Who is your primary target market?

Families who care about their homes and communities.

How has the industry changed since you have been in business?

We've gradually seen the demographic of our guests grow younger and more diverse. We've also gradually adopted better digital tools, data, and ways of reaching our target audience. And here at Rockledge Gardens, we've put greater emphasis on community experiences and education, both with classes and workshops and robust educational content on our website and in our signage.

What are the biggest challenges you have faced in the past?

The biggest challenges are always the people challenges. But those are also the most rewarding and worthwhile to work on.

How has the pandemic impacted your business and the industry?

Because of the pandemic we added an ecommerce site for curbside pick-up, putting all our inventory online. Without the pandemic we may have waited another five years to modernize in this way. While it completely saved the day during the beginning of the pandemic when we closed to the public for four weeks during our spring season, it has had the happy side effect of becoming a tremendous tool and resource for our guests and a time-saver for our team. Even if guests aren't using it to make purchases online in high numbers they certainly use it to check out inventory and plan their visits from home. Additionally the pandemic has forced our industry to really examine what we can offer our employees beyond a paycheck and we've made strides in our employee development programs that I'm really proud of. And finally, the pandemic forced us to rethink many of our events and the new approaches we've developed are less stressful for our staff and more profitable for the business. We are never going back!

What challenges do you expect to encounter going forward?

It's important that we continue to focus on education to help all the new gardeners who found our industry over the last 18 months be successful. If they don't succeed



LIZ LARK-RILEY ROCKLEDGE GARDENS

in their gardens they won't continue to garden. It's our job to help them succeed so that the growth we've experienced can be sustained.

What opportunities do you see on the horizon for your business/industry?

In many ways the opportunities and challenges are one and the same. Through focus on education and experiences, we have an incredible opportunity to become something of value to our community: a source for great information, a place to find peace and fellowship, and a hub from which people go back out into the world making it a better, greener, more beautiful place.

What is your favorite aspect or memory from working in the Garden Center business?

I love that I get to come to work surrounded by greenery and flowers. I love that we are more than a store for our community. I love that we are making the world a better place and creating specialness in our small corner of earth



Hardgoods or inputs, as well as services directly or tangentially related to the environmental horticulture industry. Examples include containers, tools, mulch, soil and peat suppliers, irrigation manufacturers, logistics brokers, and financial services to name a few.

ALLIED



FNGLA's membership includes "allied" horticulture-related companies involved with or tangential to the nursery and landscape businesses. These firms' specializations range from tools and equipment to crop insurance to irrigation supplies to pottery makers, mulch, soil supplies, nutrients, chemicals, and everything in-between. Landscape firms, production nurseries, and retail garden centers also need service support in the forms of bank financing, HR and payroll services, healthcare and business insurance, accounting, and attorney consultation. Some allied operations have a single employee, while others are over 1,000. An allied company might have sales of \$250,000 or it may have more than \$100 million. Analyzing the characteristics of this sector as a composite would be inaccurate, as it is so diverse. All of them, however, do lean on other FNGLA members for continued success, so thus their experiences over the past two years and expectations going forward are very relevant.

Allied companies face external risks like everyone else, most importantly the continued impact of Covid-19. Partially spilling over from the pandemic are the next two highest concerns: supply chain disruptions and increasing costs of production and inflation. The manufacturers and service providers in the allied sector depend heavily on employees in client-facing roles so one of their chief concerns is lack of professionalism, noted as "very important" by almost 90% of respondents. Labor availability separately also falls into the top five risks. While these issues are real and could be detrimental to business, 80% of respondents report sales increased in 2020. Going forward, 90% of owner-operators expect business to grow over the next 1-3 years. Challenges are to be expected, but overall there is strong optimism for the future of these businesses related to the nursery and landscape industry.











INDUSTRY SPOTLIGHT

MIKE AGATE, SITEONE LANDSCAPE SUPPLY | ORLANDO, FL

What motivated you to enter the landscaping industry and how long have you been in it?

I have been in the landscaping industry for 21 years and had always wanted to own my own business. I was traveling a lot in a consulting role, my wife worked and we had two very young children. A friend had just lost his job and came to me with an idea of starting a landscaping company. That weekend, we wrote a business plan, I resigned from my job on the following Monday and started our landscaping business on Tuesday. Eleven months into the business I bought him out and then sold the company 6 years later. I worked in a few different organizations in the landscaping industry before taking a role as a branch manager with John Deere Landscapes (now SiteOne). I have been with SiteOne for 10 years and I am in my 4th role.

Who is your primary target market?

The professional - Landscape Contractor, Fertilizer and Chemical Applicator, Paver Contractor, and Irrigation Contractor.

How has the industry changed since you have been in business?

The industry is "maturing". What has always been known as a "mom and pop" industry is becoming more main stream. Five or six years ago, Private Equity money began to be invested in the industry, mainly on the wholesale side of the business, but it was also invested into a few of the very large contractors. In the past 1-2 years, there has been a huge push with PE money being invested in contractors businesses. It seems like every day we are hearing of another small well-run company being acquired by a larger company with PE money behind it.



MIKE AGATE SITEONE LANDSCAPE SUPPLY

What are the biggest challenges you have faced in the past?

The recession in 2008 really impacted our industry. When the construction industry slowed down to a crawl, installation contractors stopped purchasing. A number of businesses closed while some of the larger contractors added a maintenance division to their company's offerings. Residential and commercial companies faced serious challenges finding work, paying their bills and their employees. However, the industry has come roaring back!

How has the pandemic impacted your business and the industry?

The pandemic has impacted the industry both good and bad! On the good side, people were working from home and realizing their yards needed work. Plus, with "shelter in place" orders, homeowners wanted their back yard and outdoor living spaces upgraded! On the bad side, the struggles that the nation's supply chain is having has had a major negative impact in getting the products and materials from manufacturers.

What challenges do you expect to encounter going forward?

The unknown with the current economy is the most prevalent challenge right now. It's kind of hard to look too far into the future with the economy still being majorly impacted from the pandemic. Supply chain issues, cost increases and construction slow down are commonly the results of a shaky economy.

What opportunities do you see on the horizon for your business/industry?

As mentioned earlier, Private Equity money is opening opportunities. PE money is changing the culture of how businesses are being operated in the industry. Businesses are becoming more professional, with a stronger focus on their margin. The industry as a whole is learning how to pass on cost increases to the end user. In the past, we struggled as an industry to pass on increases, forcing manufacturers and wholesalers to take the hit. That trend is changing.

What is your favorite aspect or memory from working in the wholesale supplier business?

The relationships are my favorite aspect. This industry is very relationship driven. Some of my best friends and mentors have come from my 21 years of being in the industry.





FNGLA

Until 1951, the Florida State Nurserymen were part of the Florida State Florist and Nurserymen Association. Given the growing importance of its specific industry within Florida, some nurserymen believed it was time for a separate organization.

The first official organized meeting was held in Miami on May 25-27, 1952. An organizational plan was adopted for the 'Florida Nursery Growers Association.' Dave Stabler of Winter Haven Nursery agreed to be president and James F. Griffin, Jr. arrived as Executive Secretary in early 1953. FNGA gained more strength and clout by absorbing the members of the Florida Foliage Association in 1993, the Florida Ornamental Growers Association in 1995, the Florida Landscape Designers Association in 1999, and the Florida Citrus Nursery Association in 2007. "Landscape" was added to the FNGA moniker in 2004, renaming it as the Florida Nursery, Growers, and Landscape Association (FNGLA). Throughout this time, FNGLA established itself as the largest state nursery and landscape association in the nation.

Now, entering its 7th decade of industry service, FNGLA is in its prime representing all industry sectors, among them are seven divisions: Citrus Nurseries; Floriculture; Foliage; Garden Centers; Landscape Firms; Woody shrub and tree producers; and, Horticultural suppliers. As a vertically integrated association, FNGLA also fully represents and targets the needs of Florida's landscape design, contracting, irrigation and maintenance companies.

FNGLA produces two of the nation's largest nursery/landscape industry-only trade shows: the Tropical Plant International Expo and The Landscape Show. FNGLA also maintains a network of 14 Chapters geographically located throughout Florida.

FNGLA conducts industry advocacy in Tallahassee and Washington, D.C., and offers marketing, professional education, industry certifications and apprenticeships as some of the services FNGLA delivers to its members and the industry-at-large.





Farm Credit of Central Florida

FARM CREDIT

The Farm Credit System
is a nationwide network
of borrower-owned lending
institutions and specialized
service organizations. Farm Credit
provides more than \$315 billion
in loans to farmers, ranchers, rural
homeowners, aquatic producers, timber
harvesters, agribusinesses, and agricultural
and rural utility cooperatives.

Congress established the Farm Credit System in 1916 to provide a reliable source of credit for the nation's farmers and ranchers. The Farm Credit's mission is to provide a reliable source of credit for American agriculture by making loans to qualified borrowers at competitive rates and providing insurance and related services. Today, the System provides more than one-third of the credit needed by those who live and work in rural America.

Farm Credit of Central Florida is the local association for the region adjacent to the I-4 corridor and serves those in the following thirteen counties: Citrus, Hernando, Pasco, Pinellas, Hillsborough, Polk, Sumter, Lake, Osceola, Orange, Seminole, Volusia and Brevard. Farm Credit borrowers have long enjoyed the benefits of doing business with local offices, where people know their business, their community, and their market. We are headquartered in Lakeland and have brick and mortar locations in Apopka, Brooksville, and Plant City. Our affiliation is with AgFirst Farm Credit Bank in Columbia, South Carolina. Local service with national stability. We are Farm Credit.



