

Floriculture Crops Economic Outlook for 2014¹

Hayk Khachatryan, Alan W. Hodges, and Shawn Steed²

Introduction

This report summarizes industry statistics using data from primary and secondary sources and highlights production and sales trends in the US environmental horticulture industry in 2014. Data sources include the United States Department of Agriculture National Agricultural Statistics Service (USDA/NASS), US Census Bureau, the IBIS World Industry Reports, National Association of Home Builders, S&P/Case-Shiller Home Price Indices, US Bureau of Labor Statistics, University of Florida Bureau of Economic and Business Research, AIA Economics and Market Research Group, and Florida Realtors®. Primary data is collected through the National Nursery Survey, conducted by the Green Industry Research Consortium.



Figure 1.
Credit: UF/IFAS

The report is organized as follows. The Overview section briefly discusses the US floriculture wholesale value statistics reported in the recent floriculture report by USDA and provides a snapshot of the economic impacts of the environmental horticulture industry in Florida. The Floriculture Crops Production section discusses changes in the number of growers, the area used for production, and the wholesale value of sales in more detail. Next, the Nursery and Floriculture Industry Consolidation section discusses changes in the number of enterprises and establishments from 2004 to 2012. The Housing Market Situation section discusses trends in the housing sector (single-family homes sold, new construction starts), with more detailed information on the housing market in

Florida and implications for the environmental horticulture industry. The Consumer Confidence and Expectations section discusses consumers' expectations of the economic conditions and personal financial situation in Florida, which are also important for assessing demand for floriculture products.

Overview

The environmental horticulture industry reflected the sluggish economic recovery, strong import competition, and slow pace of technological change in the US industry throughout 2013. According to a recent floriculture crops report (USDA/NASS 2013), the leading states in terms of year-over-year percentage increase in wholesale value in 2012 were Pennsylvania (20.7%), Ohio (15.6%), North Carolina (13.5%) and Texas (11.1%). Among the top ten production states, the laggards were California and Florida, each down by 2.6 percent. However, in terms of wholesale value of sales (i.e., market share), California and Florida remain the top two states in the country, with \$974.2 million (M) and \$802.6 M, respectively (all dollar amounts in US dollars). When small producers (growers with less than \$100,000 annual sales) are included, total estimated sales in California and Florida rise to \$985 M and \$812 M, respectively. Together these two states account for more than 44 percent of the total wholesale value of sales in the United States.

The environmental horticulture industry in Florida is among the most important sectors of the state's agricultural economy, with total output or revenue impacts (i.e., the dollar value of a good or service produced or sold; equivalent to sales revenues plus changes in business inventories) in 2010 estimated at \$16.29 billion (B). This figure includes \$11.87 B in direct output impacts of industry sales, \$692 M in indirect output impacts from firms that supply inputs to the horticulture sectors, and \$3.72 B in induced impacts associated with spending by industry employee and proprietor households (Hodges et al. 2011). More specifically, total output (or revenue) impacts were \$8.12 B for nurseries, \$6.24 B for landscape services, \$1.68 B for horticultural retailers, and \$243 M for allied horticultural suppliers. Of the four environmental horticulture sectors, nurseries and greenhouses generated the largest share of indirect and induced multiplier impacts (i.e., impact from firms that supply inputs to the

horticulture sectors) due to their large exports to the domestic and international markets.

Floriculture Crops Production

Number of Growers

The number of horticultural producers continues its downward trajectory that started with the economic slowdown in 2008–2009 (Table 1). The total number of producers in the 15 states included in the USDA survey (USDA/NASS 2013) declined by 6 percent in 2012 to 5,419 growers (for comparison, the decline from 2010 to 2011 was 6.5 percent). The number of producers declined in all 15 states surveyed, with the exception of Maryland and Hawaii, where the number increased by 3.2 and 1.7 percent, respectively. The 2012 rate of decline of floriculture crops producers in some states, as compared with 2011, was as follows: California (3.2% vs. 9.2 %), Illinois (3.9% vs. 10.9 %), New York (6.2% vs. 6.5 %), Ohio (8.1% vs. 9.1 %) and Washington (5.8% vs. 12.8 %). However, the year-over-year (2011 to 2012) comparison showed that the number of growers in the majority of states in the USDA fifteen-state program declined considerably. For example, the total number of growers in Florida declined by 9.7 percent in 2012, while the decline in 2011 was only 6.3 percent.

The number of growers also declined in New Jersey (7.7 % in 2012; 4.4 % in 2011), Oregon (12.7 % in 2012; 6.5 % in 2011), South Carolina (23.1 % in 2012; 10.3 % in 2011) and Texas (8.4 % in 2012; 0.7 % in 2011). The total number of growers included in the USDA/NASS fifteen-state program declined by 745 in the years between 2010 and 2012 (i.e., 401 growers from 2010 to 2011, and 344 growers from 2011 to 2012) (Table 1).

Area Used for Production

Covered Area

The total area of floriculture crops produced under cover declined in most of the 15 states included in the USDA/NASS report (2013), averaging a 1.4 percent decline from 2011 to 2012 (Table 2). The average rate of decline in 2011–2012 is slightly lower (1.4%), compared with 2010–2011, which exhibited a 2.5 percent decline. Only three states saw an increase in production areas: Oregon (13.9%), New Jersey (4.1%), and Washington (0.5%) (Note: for New Jersey and Oregon, the positive trend in the area used for covered production continues from 2011, when the area increased in comparison with 2010 by 7.0% for New Jersey and 0.1% for Oregon). South Carolina and North Carolina reported the largest reductions, 24.6 and 15.4 percent, respectively. The decline in the South Carolina covered area of production is consistent with the decline from 2010 to 2011 (27.9%); however, the decline in North Carolina from 2010 to 2011 was only 1.3 percent. Overall, the decline in the covered area used for production declined 1.4 percent from 2011 to 2012, which

is 0.9 percent less than the decline from 2010 to 2011 (2.5%).

Open Ground

From 2011 to 2012, the largest increased acreages of open-grown floricultural crops were observed in Washington (78%), Illinois (64.4%), and Oregon (18.9%). The number of acres used for open-ground operations increased in Texas (8.4%), Hawaii (6.8%), and North Carolina (3.8%). In contrast, from 2010 to 2011, only three states had reported increased acres for open-ground production: Pennsylvania (17.5%), Michigan (11.3%), and Texas (3%). The largest reductions in open-ground production in 2012 were reported by the growers in South Carolina (82.1%), Maryland (58.1%), Ohio (25.7%), and Pennsylvania (17.6%). The total decline in open acres from 2011 to 2012 for all 15 states studied was 2.1 percent, which is 4.5 percent lower than the decline from 2010 to 2011 (Table 2).

Other Type of Cover

Annual production statistics for horticultural crops from additional operations such as greenhouses (including those made of glass, film plastic, fiberglass, and other rigid materials) and shade cloth and other temporary covers are provided later (see Tables 6–10, Appendix I).

Wholesale Value

The wholesale value of all plant category sales in 2012 increased 1.5 percent to \$3.993 (B). Similar to changes in the number of growers, there were noticeable variations among the 15 states and across plant categories (i.e., annuals, perennials, potted flowering plants, foliage, cut flowers, or propagative material). From 2011 to 2012, the floriculture crops' wholesale value in Florida and California (top two producing states) decreased 2.6 percent to \$802.6 M and \$974.2 M, respectively (Table 3). In contrast, significant year-over-year increases in the wholesale value of sales were observed in North Carolina (13.5%, to \$254 M), Ohio (15.6%, to \$222.3 M), Pennsylvania (20.7%, to 148.9 M) and Texas (11.1%, to \$275.7 M).

The variation in sales figures can also be seen across plant categories. For example, from 2011 to 2012, annual bedding/garden plant sales increased by two percent, to \$1.36 B (Table 11, Appendix II); perennials increased by 5.7 percent, to \$594.5 M (Table 12, Appendix II); foliage increased by 4.6 percent, to \$641.8 M (Table 14, Appendix II); and propagative material increased by three percent, to \$366 M (Table 17, Appendix II). On the other hand, wholesale value of containerized floriculture decreased by 3.5 percent (to \$617.8 M) in 2012 (Table 13, Appendix II). Similarly, cut flowers' wholesale value decreased by 4.7 percent, to \$342.1 M (Table 15, Appendix II), and cut cultivated greens' sales decreased by 1.5 percent, to \$71 M (Table 16, Appendix II).

Nursery and Floriculture Industry Consolidations

Production of nursery and floriculture crops in the United States continues to have a low level of market concentration and relatively moderate barriers to entry. There were more than 59,000 establishments in 2004, which declined by 17 percent by 2008 (to 49,215), and by 23 percent by 2012 (to 45,565). In contrast, the number of enterprises dropped by 11 percent from 42,000 to 37,375 by 2008, and by 15 percent by 2012 (to 35,636) (Figure 2). Although small businesses cover the largest part of the industry (in terms of the number of firms), consolidation changes the industry toward large-scale operations, following the same trend in other agricultural industries. Larger producers enjoy lower per-unit costs of production and distribution made possible by economies of scale and scope (e.g., innovative supply chains, direct marketing opportunities). With increasing global opportunities, reaching out to international export markets may also favor larger producers. Competition from imports of foliage and cut flowers will remain one of the primary challenges to domestic producers.

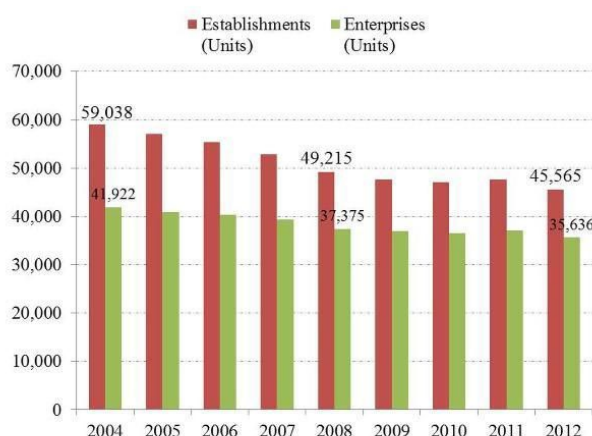


Figure 2. Number of enterprises and establishments in the US plant and flower production industry, 2004–2012.

Credit: IBIS World Reports: 2013 Plant & Flower Growing in the United States.

Housing Market Situations

Single-Family New Houses Sold in the United States

The economic performance of the nursery and greenhouse industry is closely related to developments in the housing market, namely new construction starts and sales of existing houses. Sales of new houses generate the greatest demand for the products and services provided by the nursery and greenhouse industry. Housing market trends in states such as California or Florida (states with the

highest number of foreclosures) are important considerations for the estimation of consumer demand for horticultural products and services at the national level (indoor and outdoor plants, landscaping and related supplies). Figure 3 presents quarterly median sales prices trends of new houses sold, by US regions. Median values for the housing market represent a useful parameter for horticultural sales because mean prices can be affected by large deviations (e.g., very high- or low-priced house sales) in the house sales data.

Prices for new houses in the South and the Midwest regions have historically trended lower than the US median prices (Figure 3). Although median prices for new houses sold in the West significantly declined after the peak of the market around 2005/06, the trend has generally been above the overall US median prices. The median sales price trend in the Northeast region has been fluctuating since 2005, and there is no deterministic trend. Median sales prices of new houses in the West, however, show a considerable upward trend since 2011. The sales prices in the South and Midwest regions are lower than the national average, but an upward trend is observed from 2011. The overall increase in the median sales prices may lead to increased construction and higher demand for environmental horticulture products in the next years.

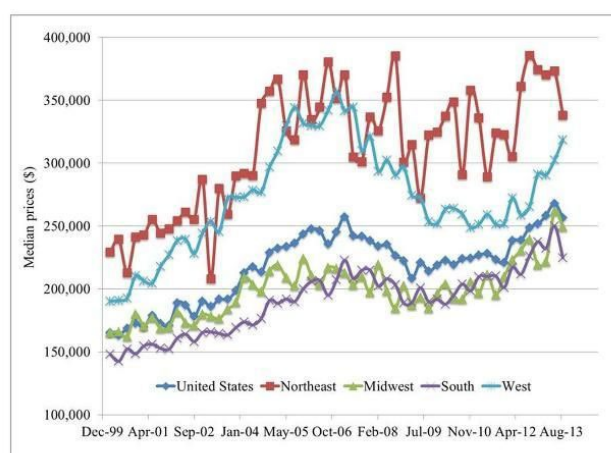


Figure 3. National quarterly median sales price of new houses sold by region.

Credit: US Census Bureau. Note: Data are for new, single-family houses only.

Single-Family House Construction Starts in the United States

As with sales of new houses, new construction starts will contribute to the economic recovery of the nursery and floriculture industry. The main difference, however, is that demand associated with new construction starts is delayed by almost one year until houses are constructed and the demand for the horticultural products and services is generated. As shown in Figure 4, the construction starts trend in the Northeast, Midwest, and West was relatively

flat between 2011 and 2013. Housing starts in the South, however, were relatively higher, ranging between 20 thousand to over 30 thousand units since January 2012. Since December 2012 (the second lowest point of the total US line), the number of single-family housing starts has significantly increased. The highest number of single-family homes construction starts was in June 2013 (60,900 units). The total number of single-family homes construction in 2013 was 576,200, a 7.6 percent increase from the 535,300 figure in 2012.

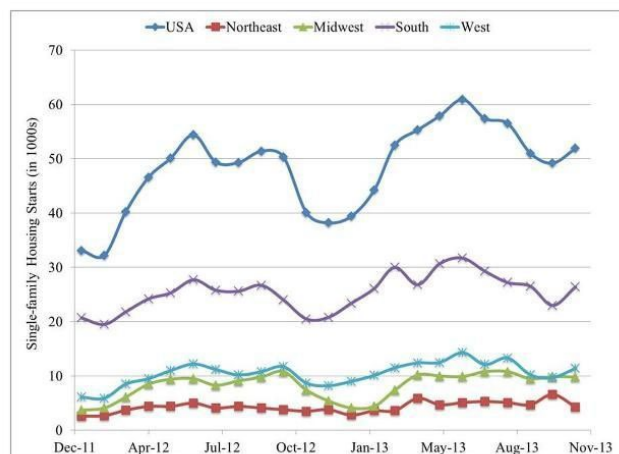


Figure 4. National single-family housing construction starts by region.

Credit: US Census Bureau. Note: The data are for new residential housing units authorized by building permits, started, and completed.

Architectural Billing Index

Compiled by the American Institute of Architects Economics and Market Research Group, the Architecture Billing Index (ABI) is another useful economic indicator that can be used to predict construction activity. More precisely, the ABI is a seasonally adjusted, leading economic indicator of potential non-residential construction spending for one year into the future. The American Institute of Architects surveys approximately 300 member firms to identify significant ($\pm 5\%$) monthly changes in client billings (Baker and Saltes 2005). An ABI value of 50.0 indicates no difference from the aggregate firms' previous month's billings. Movements of the index away from the 50 value indicate that architectural client billings are either increasing or decreasing. This in turn would be visible in nonresidential construction spending at a future date because architectural services is the first step in the process of building construction. For most of 2013, the ABI was in a position above 50, except for the month of April (48.6) (Figure 5). November and December of 2013 saw the index fall below 50 to values of 49.8 and 48.5 respectively, indicating a reduction in the demand for architectural services with a potential slowdown in nonresidential construction spending late into 2014.

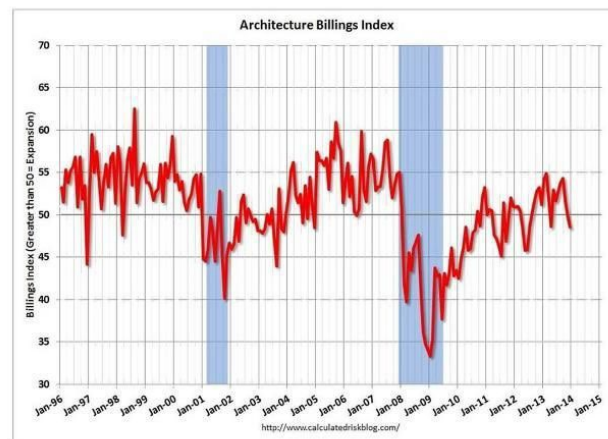


Figure 5. Architectural billing index.

Credit:

<https://www.calculatedriskblog.com/2014/01/aia-architecture-billings-index.html>

Single-Family New House Sales in Florida

According to a recent report compiled by Florida Realtors® (2013), the number of single-family houses sold in Florida increased by 17.3 percent in the third quarter (Q3) in 2013 compared with the same period in 2012 (Table 4), reaching 60,661 houses. The one-year median sales price for single-family houses increased by 18.6 percent (reaching to \$175,000). In Q3 in 2013, pending sales of single-family houses in Florida increased by 18.4 percent, to 69,483 houses (compared with Q3 in 2012), while cash and sales increased by 13.9 percent, to 25,442 houses. Short-sale transactions (an indicator of consumer distress) were down 30.9 percent, to 7,935 houses, with an increase in the median price by \$16,000 (to \$130,000 in Q3 2013). Sales of foreclosure or real-estate-owned (REO) houses were up by 14.3%, to 10,332 houses. Traditional sales increased by 35.8%, to 42,394 units (Table 5).

Consumer Confidence

Following the survey model by the University of Michigan Survey of Consumers conducted since 1952 (<http://www.sca.isr.umich.edu>), the UF Bureau of Economic and Business Research has measured consumers' confidence and optimism for over the next five years (BEBR 2013). The consumer confidence index measures consumer attitudes and buying intentions each month and is benchmarked to the index in 1985. About 40 percent of the index is based on questions about current economic conditions, and 60 percent is concerned with expectations of future conditions. The questionnaire used by the BEBR consists of five questions, and responses from approximately 500 households in Florida are collected monthly. As shown in Figure 6, consumers' expectations for national economic conditions from 2012 throughout 2013 were relatively higher than in 2011. Expectations over the next five years were higher in 2012, but both

short and long term converged in 2013. Overall, the expectations for national economic conditions were within a higher range and there is less variation throughout 2012 and 2013 compared with the previous five years.

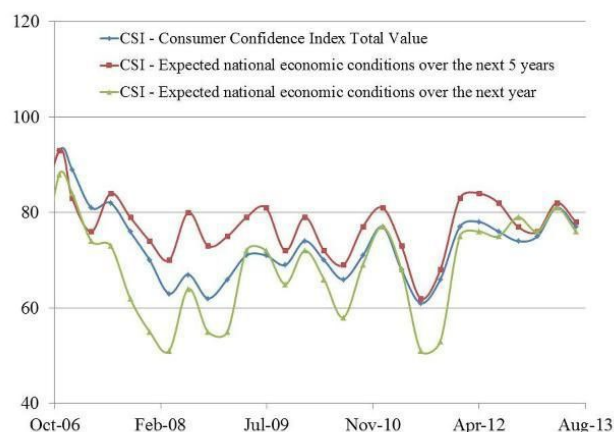


Figure 6. Florida consumer confidence index and expected national economic conditions, October 2006–July 2013.

Credit: University of Florida Bureau of Economic and Business Research

Changes in the consumer confidence index have important implications for the environmental horticulture industry because the index reflects the degree of optimism that the consumers express about the state of the economy, and their degree of optimism is closely associated with their spending and savings behaviors. The more confident consumers feel about the stability of their personal incomes and the state of the economy overall, the more likely they are to purchase goods and services. To understand the significance of consumer spending to the national economy, consider spending as part of the leading economic indicators, such as the gross domestic product (GDP). In the United States, the proportion of household private consumption (i.e., the market value of all goods and services purchased by households) is estimated at 69 percent of the gross domestic product (The World Bank 2013). The demand for horticultural products and services, therefore, can be explained partially by changes in the level of consumers' expectations of the state of the economy.

Conclusions

In order to communicate the recent developments and future trends in the US environmental horticulture industry to the stakeholders, this report combined data related to the production and wholesale value of floriculture crops in the United States. The nursery and floriculture production and wholesale trends discussion was complemented by a review of the US housing market situation, specifically focusing on the housing market trends in Florida, as an important indicator of the industry's economic performance. According to the

USDA/NASS fifteen-state statistics, the number of floriculture crop growers from 2010 to 2012 declined by 12.1 percent to 5,419. Although glass greenhouse production area increase by 3.7 percent in 2012, the total greenhouse production area (including film plastic, fiberglass, and other rigid covers) declined by 2.9 percent in 2012. Open-ground production acres followed the same trend by declining 6.6 and 2.1 percent in 2011 and 2012, respectively. Total wholesale value across all plant categories, however, increased by 1.5% in 2012, to \$3.99 B, which can partly be explained by improved sales of new and existing houses, which generated additional demand for the floriculture crops. With the significant improvements in the US housing market situation, as shown by the national quarterly medial sales prices and the number of single-family housing construction starts, it is expected that the demand for floriculture and nursery crops and landscaping services will likely increase in the next several years.

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Appendices

Appendix I. Area Used in Production by Different Types of Greenhouse Operations

Table 1. Number and percentage change of floriculture crops production in 2010, 2011, and 2012.

State	Total Number of Producers				
	2010 (number)	2011 (number)	2012 (number)	2010–2011 % change	2011–2012 % change
California	696	632	612	–9.2%	–3.2%
Florida	749	702	634	–6.3%	–9.7%
Hawaii	315	291	296	–7.6%	1.7%
Illinois	257	229	220	–10.9%	–3.9%
Maryland	176	155	160	–11.9%	3.2%
Michigan	621	584	539	–6.0%	–7.7%
New Jersey	339	324	299	–4.4%	–7.7%
New York	658	615	577	–6.5%	–6.2%
North Carolina	271	253	235	–6.6%	–7.1%
Ohio	530	482	443	–9.1%	–8.1%
Oregon	261	244	213	–6.5%	–12.7%
Pennsylvania	709	709	700	0.00%	–1.3%
South Carolina	87	78	60	–10.3%	–23.1%
Texas	276	274	251	–0.7%	–8.4%
Washington	219	191	180	–12.8%	–5.8%
15-state total	6,164	5,763	5,419	–6.5%	–6.0%

Table 2. Areas used for production and percentage changes by covered and open-ground area in 2010, 2011, and 2012.

State	Total Covered Area				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010–2011 % change	2011–2012 % change
California	135,950	142,579	142,206	4.9%	–0.3%
Florida	307,854	287,463	284,371	–6.6%	–1.1%
Hawaii	19,527	19,094	18,542	–2.2%	–2.9%
Illinois	15,383	14,230	14,204	–7.5%	–0.2%
Maryland	7,313	6,346	6,011	–13.2%	–5.3%
Michigan	48,210	48,705	47,546	1.0%	–2.4%
New Jersey	19,807	21,185	22,059	7.0%	4.1%
New York	25,718	25,309	25,217	–1.6%	–0.4%
North Carolina	22,099	21,805	18,441	–1.3%	–15.4%
Ohio	29,234	28,243	27,264	–3.4%	–3.5%

Oregon	16,701	16,717	19,045	0.1%	13.9%
Pennsylvania	20,096	19,704	19,647	-2.0%	-0.3%
South Carolina	5,508	3,972	2,993	-27.9%	-24.6%
Texas	45,092	45,236	42,795	0.3%	-5.4%
Washington	11,342	11,317	11,373	-0.2%	0.5%
15-state total	729,834	711,905	701,714	-2.5%	-1.4%
State	Open Ground				
	2010 (acres)	2011 (acres)	2012 (acres)	2010-2011 % change	2011-2012 % change
California	10,555	10,418	9,983	-1.3%	-4.2%
Florida	6,538	5,881	5,411	-10.0%	-8.0%
Hawaii	1,198	1,151	1,229	-3.9%	6.8%
Illinois	882	357	587	-59.5%	64.4%
Maryland	776	597	250	-23.1%	-58.1%
Michigan	3,248	3,616	3,243	11.3%	-10.3%
New Jersey	2,507	2,112	1,895	-15.8%	-10.3%
New York	760	670	607	-11.8%	-9.4%
North Carolina	662	599	622	-9.5%	3.8%
Ohio	469	432	321	-7.9%	-25.7%
Oregon	2,114	2,002	2,380	-5.3%	18.9%
Pennsylvania	475	558	460	17.5%	-17.6%
South Carolina	717	537	96	-25.1%	-82.1%
Texas	999	1,029	1,115	3.0%	8.4%
Washington	1,684	1,425	2,536	-15.4%	78.0%
15-state total	33,584	31,384	30,735	-6.6%	-2.1%

Appendix II. Wholesale Value by Plant Types

Table 3. Wholesale value and percentage change of all floriculture crop sales in 2010, 2011, and 2012.

State	Wholesale Value of All Sales				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010-2011 % change	2011-2012 % change
California	1,001,478	1,000,415	974,165	-0.1%	-2.6%
Florida	804,851	823,833	802,649	2.4%	-2.6%
Michigan	32,761	361,486	362,761	-8.4%	0.4%
Texas	117,487	248,217	275,724	-10.1%	11.1%
North Carolina	83,983	223,887	254,020	2.0%	13.5%
Ohio	394,618	192,252	222,289	-0.8%	15.6%
New Jersey	167,882	169,257	173,815	0.8%	2.7%
Washington	147,616	160,107	162,098	3.8%	1.2%

State	Wholesale Value of All Sales				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010-2011 % change	2011-2012 % change
New York	219,478	151,565	152,226	2.7%	0.4%
Pennsylvania	193,889	123,371	148,884	-4.1%	20.7%
Oregon	126,463	125,378	123,411	-0.9%	-1.6%
Illinois	128,665	110,318	109,691	-6.1%	-0.6%
Maryland	90,344	87,381	86,051	4.0%	-1.5%
South Carolina	276,249	85,544	85,354	-5.3%	-0.2%
Hawaii	154,277	32,684	31,021	-0.2%	-5.1%
15-state total	3,994,611	3,936,820	3,993,998	-1.4%	1.5%

Table 4. Florida new single-family house sales in Q3 2012 and 2013.

Category	Q3 2012	Q3 2013	% change
Closed sales	51,735	60,661	17.3%
Cash sales	22,346	25,442	13.9%
New pending sales	58,676	69,483	18.4%
New listings	76,807	91,153	18.7%
Median sale price (\$)	147500	175000	18.6%
Average sale price (\$)	216454	247933	14.5%
Median days on market	60	48	-20.0%
Avg. % of orig. list price received	91.70%	94.30%	2.8%
Pending inventory	(No Data)	45,803	N/A
Inventory (active listings)	104,092	99,463	-4.4%
Month's supply of inventory	6.4	5.3	-17.5%

Table 5. Florida new single-family house sales by type in Q3 2012 and 2013.

Sales Type		Q3 2012	Q3 2013	% change
Traditional	Closed sales	31,209	42,394	35.80%
	Median sale price (\$)	\$183,304	\$209,500	14.30%
Foreclosure/REO	Closed sales	9,040	10,332	14.30%
	Median sale price (\$)	\$93,000	\$102,115	9.80%
Short sale	Closed sales	11,486	7,935	-30.90%
	Median sale price (\$)	\$114,000	\$130,000	14.00%

Table 6. Area used and percentage change for total greenhouse cover production in 2010, 2011, and 2012.

State	Total Greenhouse Cover				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010-2011 % change	2011-2012 % change
California	104,510	107,465	105,725	2.8%	-1.6%
Florida	53,028	52,397	47,859	-1.2%	-8.7%
Hawaii	4,086	4,245	3,674	3.9%	-13.5%

State	Total Greenhouse Cover				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010–2011 % change	2011–2012 % change
Illinois	14,349	13,836	13,825	-3.6%	-0.1%
Maryland	6,872	6,148	5,687	-10.5%	-7.5%
Michigan	47,697	47,973	46,915	0.6%	-2.2%
New Jersey	19,557	20,806	21,674	6.4%	4.2%
New York	25,378	25,023	24,869	-1.4%	-0.6%
North Carolina	20,099	19,864	17,673	-1.2%	-11.0%
Ohio	28,796	27,886	26,084	-3.2%	-6.5%
Oregon	15,290	14,988	16,765	-2.0%	11.9%
Pennsylvania	19,883	19,503	19,371	-1.9%	-0.7%
South Carolina	4,837	3,417	—	-29.4%	—
Texas	35,433	35,206	34,315	-0.6%	-2.5%
Washington	11,113	11,129	—	0.1%	—
15-state total	410,928	409,886	398,059	-0.3%	-2.9%

Table 7. Area used and percentage change for shade and temporary cover production in 2010, 2011, and 2012.

State	Shade and Temporary Cover				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010–2011 % change	2011–2012 % change
California	31,440	35,114	36,481	11.7%	3.9%
Florida	254,826	235,066	236,512	-7.8%	0.6%
Hawaii	15,441	14,849	14,868	-3.8%	0.1%
Illinois	1,034	394	379	-61.9%	-3.8%
Maryland	441	198	324	-55.1%	63.6%
Michigan	513	732	631	42.7%	-13.8%
New Jersey	250	379	385	51.6%	1.6%
New York	340	286	348	-15.9%	21.7%
North Carolina	2,000	1,941	768	-3.0%	-60.4%
Ohio	438	357	1,180	-18.5%	230.5%
Oregon	1,411	1,729	2,280	22.5%	31.9%
Pennsylvania	213	201	276	-5.6%	37.3%
South Carolina	671	555	—	-17.3%	—
Texas	9,659	10,030	8,480	3.8%	-15.5%
Washington	229	188	—	-17.9%	—
15-state total	318,906	302,019	303,655	-5.3%	0.5%

Table 8. Area used and percentage change for glass greenhouse production in 2010, 2011, and 2012.

State	Glass Greenhouses				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010-2011 % change	2011-2012 % change
California	14,183	14,691	17,499	3.6%	19.1%
Florida	5,346	5,540	4,727	3.6%	-14.7%
Hawaii	—	—	—	—	—
Illinois	3,718	3,015	2,659	-18.9%	-11.8%
Maryland	1,157	1,051	928	-9.2%	-11.7%
Michigan	4,551	4,345	4,396	-4.5%	1.2%
New Jersey	4,398	4,248	4,398	-3.4%	3.5%
New York	3,688	3,779	4,269	2.5%	13.0%
North Carolina	—	—	—	—	—
Ohio	8,654	8,236	7,929	-4.8%	-3.7%
Oregon	2,076	1,959	2,000	-5.6%	2.1%
Pennsylvania	1,673	1,724	2,392	3.0%	38.7%
South Carolina	—	—	—	—	—
Texas	2,045	2,238	2,388	9.4%	6.7%
Washington	2,320	2,616	—	12.8%	—
15-state total	60,487	59,129	61,338	-2.2%	3.7%

Table 9. Area used and percentage change for fiberglass and other rigid greenhouse production in 2010, 2011, and 2012.

State	Fiberglass and Other Rigid Greenhouses				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010-2011 % change	2011-2012 % change
California	35,326	35,699	34,016	1.1%	-4.7%
Florida	9,281	8,440	7,317	-9.1%	-13.3%
Hawaii	—	—	—	—	—
Illinois	1,855	1,750	2,072	-5.7%	18.4%
Maryland	554	475	487	-14.3%	2.5%
Michigan	4,894	4,896	5,769	0.0%	17.8%
New Jersey	827	359	1,060	-56.6%	195.3%
New York	1,306	1,351	1,353	3.4%	0.1%
North Carolina	—	—	—	—	—
Ohio	1,997	1,922	1,774	-3.8%	-7.7%
Oregon	2,682	2,085	1,929	-22.3%	-7.5%
Pennsylvania	1,973	2,012	1,799	2.0%	-10.6%

State	Fiberglass and Other Rigid Greenhouses				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010–2011 % change	2011–2012 % change
South Carolina	—	—	—	—	—
Texas	4,674	4,715	5,320	0.9%	12.8%
Washington	1,315	1,373	—	4.4%	—
15-state total	68,656	67,204	65,625	-2.1%	-2.3%

Table 10. Area used and percentage change for film plastic greenhouse production in 2010, 2011, and 2012.

State	Film Plastic (Single/Multi) Greenhouses				
	2010 (1,000 sq. ft.)	2011 (1,000 sq. ft.)	2012 (1,000 sq. ft.)	2010–2011 % change	2011–2012 % change
California	55,001	57,075	54,210	3.8%	-5.0%
Florida	38,401	38,417	35,815	0.0%	-6.8%
Hawaii	2,582	2,877	—	11.4%	—
Illinois	8,776	9,071	9,094	3.4%	0.3%
Maryland	5,161	4,622	4,272	-10.4%	-7.6%
Michigan	38,252	38,732	36,750	1.3%	-5.1%
New Jersey	14,332	16,199	16,216	13.0%	0.1%
New York	20,384	19,893	19,247	-2.4%	-3.2%
North Carolina	14,242	14,286	11,835	0.3%	-17.2%
Ohio	18,145	17,728	16,381	-2.3%	-7.6%
Oregon	10,532	10,944	12,836	3.9%	17.3%
Pennsylvania	16,237	15,767	15,180	-2.9%	-3.7%
South Carolina	3,548	2,549	—	-28.2%	—
Texas	28,714	28,253	26,607	-1.6%	-5.8%
Washington	7,478	7,140	7,914	-4.5%	10.8%
15-state total	281,785	283,553	271,096	0.6%	-4.4%

Table 11. Wholesale value and percentage change of annual bedding/garden plant sales in 2010, 2011, and 2012.

State	Wholesale Value of Annual Bedding/Garden Plants				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010–2011 % change	2011–2012 % change
California	240,828	246,571	230,367	2.4%	-6.6%
Florida	80,525	73,667	77,117	-8.5%	4.7%
Michigan	—	—	—	—	—
Texas	44,137	41,059	37,058	-7.0%	-9.7%
North Carolina	55,895	55,418	54,887	-0.9%	-1.0%
Ohio	207,675	203,533	201,721	-2.0%	-0.9%

State	Wholesale Value of Annual Bedding/Garden Plants				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010–2011 % change	2011–2012 % change
New Jersey	63,501	68,148	68,940	7.3%	1.2%
Washington	79,535	77,071	77,038	–3.1%	0.0%
New York	140,110	142,499	148,132	1.7%	4.0%
Pennsylvania	94,221	85,988	90,315	–8.7%	5.0%
Oregon	56,052	50,831	50,778	–9.3%	–0.1%
Illinois	—	—	70,962	—	—
Maryland	—	—	—	—	—
South Carolina	184,522	162,995	174,798	–11.7%	7.2%
Hawaii	61,789	60,078	69,672	–2.8%	16.0%
15-state total	1,376,973	1,334,269	1,360,740	–3.1%	2.0%

Table 12. Wholesale value and percentage change of herbaceous perennial plant sales in 2010, 2011, and 2012.

State	Wholesale Value of Herbaceous Perennial Plants				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010–2011 % change	2011–2012 % change
California	60,508	59,464	75,258	–1.7%	26.6%
Florida	46,766	53,294	49,312	14.0%	–7.5%
Michigan	—	—	—	—	—
Texas	42,666	40,905	41,998	–4.1%	2.7%
North Carolina	20,054	17,861	18,751	–10.9%	5.0%
Ohio	58,261	57,093	52,297	–2.0%	–8.4%
New Jersey	46,897	39,556	42,591	–15.7%	7.7%
Washington	25,017	25,672	24,932	2.6%	–2.9%
New York	43,966	41,511	43,629	–5.6%	5.1%
Pennsylvania	39,278	40,788	48,285	3.8%	18.4%
Oregon	25,072	26,134	23,635	4.2%	–9.6%
Illinois	—	—	16,567	—	—
Maryland	—	—	—	—	—
South Carolina	36,431	33,798	48,439	–7.2%	43.3%
Hawaii	32,583	41,465	39,204	27.3%	–5.5%
15-state total	564,590	562,218	594,475	–0.4%	5.7%

Table 13. Wholesale value and percentage change of potted flowering plant sales in 2010, 2011, and 2012.

State	Wholesale Value of Potted Flowering Plants				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010–2011 % change	2011–2012 % change
California	243,992	243,436	244,997	–0.2%	0.6%
Florida	115,421	114,162	73,726	–1.1%	–35.4%
Michigan	13,284	13,567	13,030	2.1%	–4.0%

State	Wholesale Value of Potted Flowering Plants				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010-2011 % change	2011-2012 % change
Texas	23,876	23,630	24,763	-1.0%	4.8%
North Carolina	4,684	4,163	3,947	-11.1%	-5.2%
Ohio	32,137	27,138	25,461	-15.6%	-6.2%
New Jersey	22,732	25,686	25,576	13.0%	-0.4%
Washington	20,807	24,182	26,585	16.2%	9.9%
New York	35,402	35,870	33,025	1.3%	-7.9%
Pennsylvania	35,789	38,575	53,183	7.8%	37.9%
Oregon	17,550	15,989	18,535	-8.9%	15.9%
Illinois	29,007	27,303	29,269	-5.9%	7.2%
Maryland	11,311	8,711	8,098	-23.0%	-7.0%
South Carolina	32,416	31,003	31,030	-4.4%	0.1%
Hawaii	7,752	6,917	6,607	-10.8%	-4.5%
15-state total	646,160	640,332	617,832	-0.9%	-3.5%

Table 14. Wholesale value and percentage change of foliage plant sales in 2010, 2011, and 2012.

State	Wholesale Value of Foliage Plants				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010-2011 % change	2011-2012 % change
California	95,216	110,150	99,933	15.7%	-9.3%
Florida	424,103	442,650	463,635	4.4%	4.7%
Michigan	8,186	8,666	8,586	5.9%	-0.9%
Texas	—	—	1,083	—	—
North Carolina	—	—	8,466	—	—
Ohio	7,812	—	—	—	—
New Jersey	—	—	—	—	—
Washington	2,629	2,519	2,531	-4.2%	0.5%
New York	—	—	22,405	—	—
Pennsylvania	—	3,450	6,128	—	77.6%
Oregon	3,700	6,960	6,457	88.1%	-7.2%
Illinois	2,593	3,336	4,444	28.7%	33.2%
Maryland	1,365	1,199	1,204	-12.2%	0.4%
South Carolina	14,709	11,183	12,335	-24.0%	10.3%
Hawaii	—	—	1,086	—	—
15-state total	586,129	613,381	641,796	4.6%	4.6%

Table 15. Wholesale value and percentage change of cut flowers sales in 2010, 2011, and 2012.

State	Wholesale Value of Cut Flowers				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010-2011 % change	2011-2012 % change
California	286,218	277,670	261,251	-3.0%	-5.9%
Florida	—	3,663	3,692	—	0.8%
Michigan	7,971	7,210	6,925	-9.5%	-4.0%
Texas	1,705	1,414	896	-17.1%	-36.6%
North Carolina	—	—	—	—	—
Ohio	9,540	5,741	4,872	-39.8%	-15.1%
New Jersey	12,423	12,635	13,429	1.7%	6.3%
Washington	1,918	—	—	—	—
New York	—	4,007	6,829	—	70.4%
Pennsylvania	—	—	—	—	—
Oregon	9,989	12,938	12,029	29.5%	-7.0%
Illinois	—	—	—	—	—
Maryland	—	—	—	—	—
South Carolina	—	—	—	—	—
Hawaii	22,991	22,310	20,930	-3.0%	-6.2%
15-state total	374,726	359,100	342,152	-4.2%	-4.7%

Table 16. Wholesale value and percentage change of cut cultivated greens sales in 2010, 2011, and 2012.

State	Wholesale Value of Cut Cultivated Greens				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010-2011 % change	2011-2012 % change
California	8,485	7,905	9,602	-6.8%	21.5%
Florida	59,394	54,684	57,812	-7.9%	5.7%
Michigan	400	373	—	-6.8%	—
Texas	—	—	—	—	—
North Carolina	—	—	—	—	—
Ohio	5	—	—	—	—
New Jersey	—	—	—	—	—
Washington	68	—	—	—	—
New York	—	—	—	—	—
Pennsylvania	—	—	—	—	—
Oregon	7,802	7,942	2,113	1.8%	-73.4%
Illinois	—	—	—	—	—
Maryland	—	—	—	—	—
South Carolina	—	—	—	—	—
Hawaii	—	—	—	—	—
15-state total	77,025	72,036	70,965	-6.5%	-1.5%

Table 17. Wholesale value and percentage change of propagative floriculture material sales in 2010, 2011, and 2012.

State	Wholesale Value of Propagative Floriculture Material				
	2010 (\$1,000)	2011 (\$1,000)	2012 (\$1,000)	2010–2011 % change	2011–2012 % change
California	66,231	55,219	52,757	–16.6%	–4.5%
Florida	78,642	81,713	77,355	3.9%	–5.3%
Michigan	—	—	—	—	—
Texas	5,103	3,310	3,893	–35.1%	17.6%
North Carolina	3,350	9,939	—	196.7%	—
Ohio	79,188	67,981	78,410	–14.2%	15.3%
New Jersey	22,329	23,232	23,279	4.0%	0.2%
Washington	17,642	22,121	21,140	25.4%	–4.4%
New York	—	—	—	—	—
Pennsylvania	24,601	23,451	24,378	–4.7%	4.0%
Oregon	6,298	4,584	9,864	–27.2%	115.2%
Illinois	22,379	20,146	27,642	–10.0%	37.2%
Maryland	—	—	—	—	—
South Carolina	8,171	9,238	9,122	13.1%	–1.3%
Hawaii	29,162	29,337	24,599	0.6%	–16.2%
15-state total	369,008	355,484	366,038	–3.7%	3.0%

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² Hayk Khachatryan, professor and Extension economist, Department of Food and Resource Economics, UF/IFAS Mid-Florida Research and Education Center; Alan W. Hodges, Extension scientist emeritus, Department of Food and Resource Economics; Shawn Steed, Extension agent IV, M.S., environmental horticulture/ornamental, UF/IFAS Extension Hillsborough County; UF/IFAS Extension, Gainesville, FL 32611.

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