

Commercial Greenhouse and Nursery Production

Census of Agriculture Reveals Declines in Floriculture Producers

Joyia T. Smith, *Purdue Agricultural Economics*

Roberto G. Lopez, *Purdue Horticulture and Landscape Architecture*

Jennifer H. Dennis, *Purdue Agricultural Economics and Purdue Horticulture and Landscape Architecture*

Greg Preston, *USDA-National Agricultural Statistics Service-Indiana Field Office*



Purdue Department of Horticulture and Landscape Architecture

www.hort.purdue.edu

Purdue Department of Agricultural Economics

www.agecon.purdue.edu

USDA-Agricultural Statistics Service

www.nass.usda.gov

Purdue Floriculture

flowers.hort.purdue.edu

The U.S. Department of Agriculture National Agriculture Statistics Service (USDA-NASS) released the 2007 Census of Agriculture on February 4, 2009. State and federal policy makers, researchers, extension personnel, growers, and others will use the census data to follow industry trends and help guide future plans.

This publication provides an overview of census data regarding the floriculture industry at the national, regional, and Indiana levels. The complete 2007 Census of Agriculture is available at: www.agcensus.usda.gov.

National Floriculture Production

The 2007 Census of Agriculture counted 2,204,792 U.S. farms. Greenhouse, nursery, and floriculture operations account for 2.5 percent of all U.S. farms. The U.S. commercial floriculture industry includes bedding and garden plants, potted flowering and foliage plants, propagative material, cut flowers, and cut cultivated greens.

As of 2007, there were 26,236 commercial floriculture operations across the United States under 18,823 acres of glass greenhouses or other protected structures (Tables 1 and 2).

From 2002 to 2007, the total number of operations that produce several crops decreased across the United States (Table 2):

- Floriculture crops (-12 percent)
- Bedding/garden plants (-10.2 percent)
- Cut flowers (-13.3 percent)
- Foliage plants (-39 percent)
- Nursery stock (-10.3 percent)
- Potted plants (-25.4 percent)

Of the 586 commercial operations in Indiana, 205 acres were under protected greenhouse structures (-27 percent since 2002) and 367 acres were in the field (-39 percent).

Table 1. Number of acres under glass greenhouse or other protected structures.

	United States		Indiana	
	2002	2007	2002	2007
Floriculture crops	22,352	18,823	336	205
Bedding/garden	8,883	8,289	217	156
Cut flowers	5,287	4,002	11	—
Foliage plants	4,207	3,211	24	8
Potted plants	3,975	3,275	84	39

— = no data available



2

Table 2. Total number of operations that produce floriculture crops, bedding/garden plants, cut flowers and florist greens, foliage plants, nursery stock, and potted flowering plants in the United States, Indiana, Illinois, Kentucky, Michigan, and Ohio.

	United States		Indiana		Illinois		Kentucky		Michigan		Ohio	
	2002	2007	2002	2007	2002	2007	2002	2007	2002	2007	2002	2007
Floriculture crops	29,788	26,236	701	586	533	652	665	617	1,271	1,332	1,416	1,227
Bedding/garden	20,460	18,376	599	488	471	588	566	508	1,077	1,131	1,196	1,043
Cut flowers and Florist Greens	5,868	5,085	73	58	50	61	38	62	188	176	144	146
Foliage plants	4,269	2,622	101	36	31	36	80	42	95	78	109	58
Nursery Stock	24,975	22,407	442	291	572	531	413	332	928	813	1,267	873
Potted Flowering Plants	8,429	6,287	251	155	153	147	228	167	320	291	405	299

Source: USDA-NASS 2002 and 2007 Census of Agriculture.

Indiana Floriculture Production

Indiana experienced many of the same trends being seen at the national level. Between 2002 and 2007, the United States and Indiana experienced decreases in the number of operations producing floriculture crops, bedding/garden plants, cut flowers/florist greens, foliage plants, nursery stock, and potted flowering plants.

Figures 1 to 6 show the changes in Indiana floriculture production between the 2002 and 2007 USDA-NASS Censuses of Agriculture. Indiana, like the rest of the country, experienced losses in all floriculture sectors: floriculture crops, bedding/garden plants, cut flowers/florist greens, foliage plants, nursery stock, and potted flowering plants.

Total Floriculture Operations

As of 2007, Indiana's floriculture industry consisted of 586 commercial operations (Table 2 and Figure 1). The value of Indiana floriculture sales in 2007 was approximately \$64.5 million. Michigan continued to lead the region with 1,332 operations (approximately 5.0 percent of the U.S. total). Ohio had 1,227

operations (4.7 percent), Illinois had 652 (2.5 percent), and Kentucky had 617 (2.4 percent).

The trend is for floriculture operations to decrease. From 2002 to 2007, the number of Indiana greenhouse operations that produce floriculture crops decreased by 16.4 percent (loss of 115 operations) (Table 2). The number of floriculture greenhouses also decreased in Ohio and Kentucky.

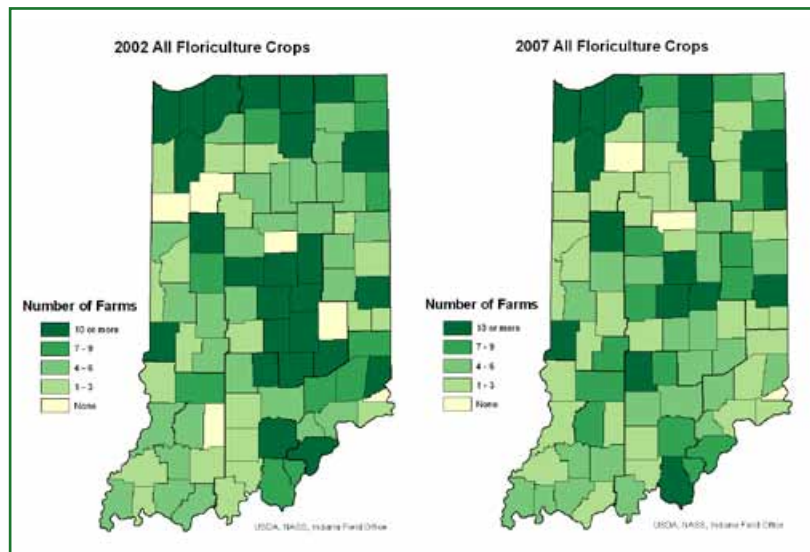


Figure 1. Number of Indiana floriculture crop producers from 2002 to 2007.

Marion County had the largest number of floriculture operations (33), followed by LaPorte County (31). Other counties with significant production include Elkhart (29), Adams (22), Lake (21), Allen (17), Hancock (16), Hamilton (14), Kosciusko (14), and Tippecanoe (14).

3

Bedding and Garden Plant Operations

As of 2007, there were 18,376 bedding/garden plant operations across the country. Indiana had 488 of these greenhouses (approximately 2.7 percent). Michigan was once again the largest regional producer with 1,131 bedding/garden plant operations (approximately 6.2 percent) (Table 2).

Again, we can see a decrease in the number of bedding/garden plant operations in Indiana (-18.5 percent), Kentucky (-10.2 percent), and Ohio (-12.8 percent) from 2002 to 2007. During the same period, the number of bedding/garden plant operations decreased by 10.2 percent across the country.

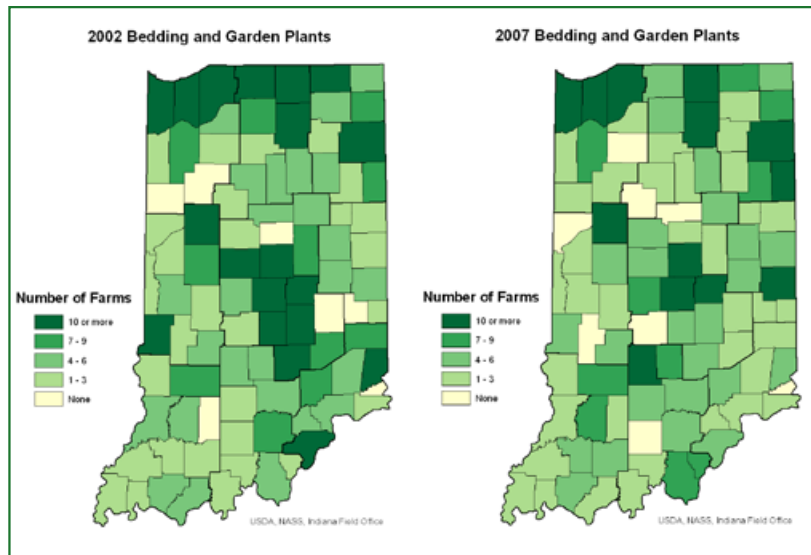


Figure 2. Number of Indiana bedding and garden plant operations from 2002 to 2007. LaPorte County is Indiana's largest producer of bedding plants with 31 operations, followed by Marion (26) and Elkhart (23) counties. Other counties with significant production include Lake (19), Allen (16), Hancock (14), Porter (13), Kosciusko (12), and Tippecanoe (12). Between 2002 and 2007, the number of Indiana bedding and garden plant producers fell 19 percent.

Cut Flowers and Cut Florist Greens Operations

In 2007, there were approximately 5,085 cut flowers/cut florist greens operations in the United States. Indiana had 58 of those operations (approximately 1.2 percent). Again, Michigan was the regional leader with 176 operations (3.5 percent).

The data for cut flowers/cut florist greens indicates a national decline in production, including Indiana and Michigan. From 2002 to 2007, Indiana production fell 20.5 percent (Table 2). Nationally, cut flowers/cut florist greens operations fell 15.4 percent over the same period.

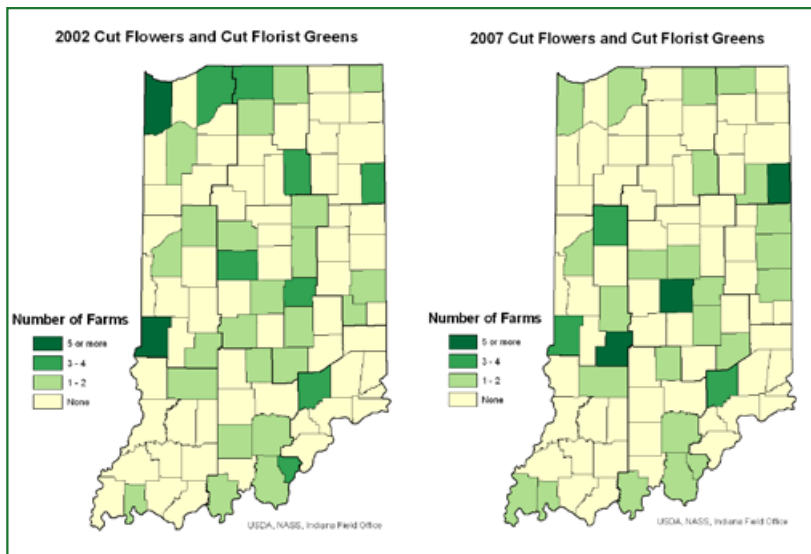


Figure 3. Number of Indiana cut flowers and cut florist green operations from 2002 to 2007. Lake and Vigo counties were the only counties in 2002 that had five or more cut flower and cut florist green operations. By 2007, the number of operations in both counties decreased, while Adams, Marion, and Owen counties experienced significant increases in the number of operations. Overall, the number of operations producing cut flowers and cut florist greens between 2002 and 2007 decreased by 21 percent.

4

Foliage Plants Operations

In 2007, there were 2,622 foliage plant operations nationally. Between 2002 and 2007 Indiana lost 65 of its operations (64.4 percent). Michigan led the region

in 2007, but Ohio led in 2002 (Table 2). Except for Illinois, all of the states surrounding Indiana lost foliage plant operations.

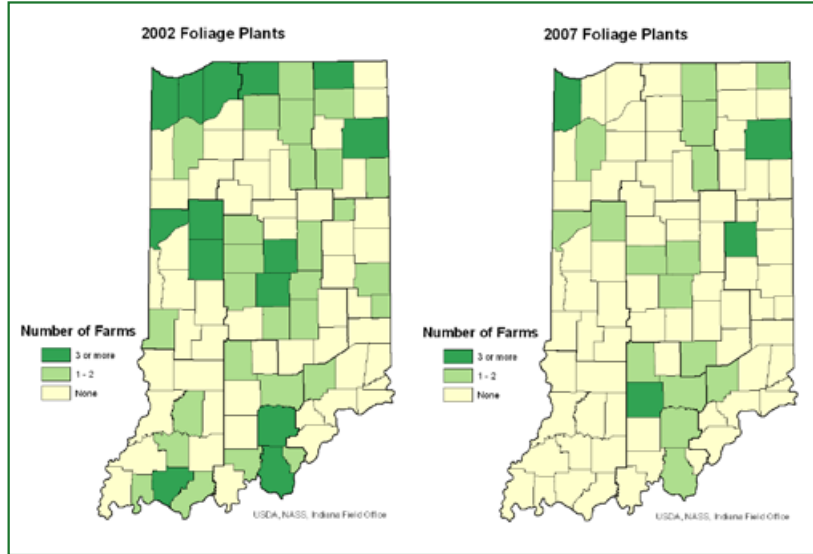


Figure 4. Number of Indiana foliage plants operations from 2002 to 2007. Overall, Indiana has seen a substantial decrease in the number of operations producing foliage plants from 14 counties with three or more farms in 2002, down to just four counties in 2007. In 2007, only 20 counties (22 percent) produced foliage plants; a 64 percent decrease in the number of operations between 2002 and 2007.

Nursery Stock Operations

In 2007, there were 22,407 nursery stock operations nationally. Indiana lost 151 operations (34.2 percent) from 2002 to 2007. In both census years, Ohio led the region in number of nursery stock operations (Table 2).

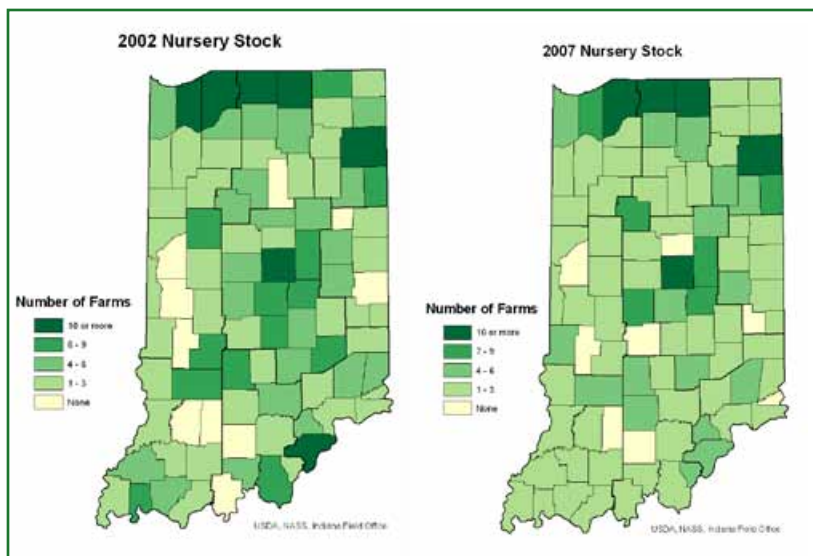


Figure 5. Number of Indiana nursery stock operations from 2002 to 2007. Allen County was the nursery crops largest producer in 2007 with 17 operations, followed by Hamilton (15) and LaPorte (13) counties. Other large producers include St. Joseph (11), Elkhart (10), Adams (9), Hancock (8), Madison (8), Porter (7), Hendricks (7), and Carroll (7) counties. During the five-year period, the number of operations producing nursery stock fell 34 percent.

5

Potting Flowering Plant Operations

As of 2007, there were 6,287 potted flowering plant operations nationally. Indiana was home to 155 of those operations (approximately 2.5 percent). Ohio led the region with 299 operations (approximately 4.8 percent) (Table 2).

Nationally, the number of potted flowering plant growers in the U.S. fell by 25.4 percent between 2002

and 2007. Following this trend, all states surrounding Indiana suffered a decline in the number of potted flowering plant growers. In Indiana, the number of potted flowering plant producers in decreased by 38.2 percent during the same time period.

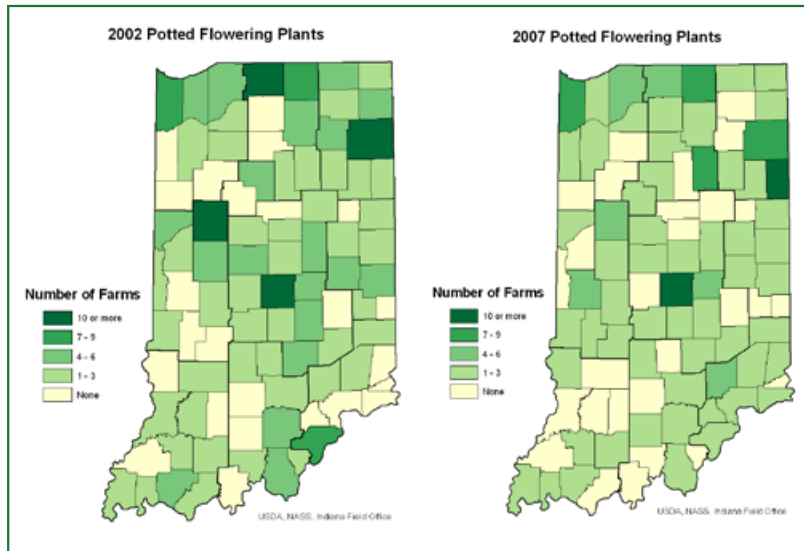


Figure 6. Number of Indiana potted flowering plants operations from 2002 to 2007.

In 2002, four counties (St. Joseph, Allen, Tippecanoe, and Marion) had at least 10 operations producing potted flowering plants. In 2007, only Marion County still had 10 or more such operations. Between 2002 and 2007, the number of operations producing potted flowering plants in Indiana fell 38 percent.

Acknowledgements

The authors thank Susan Reynolds, USDA-NASS-Indiana Field Office, for developing the Indiana county maps used in this publication.

To see other publications in this series, visit the Purdue Extension Education Store, www.the-education-store.com.

Reference to products in this publication is not intended to be an endorsement to the exclusion of others that may be similar. Persons using such products assume responsibility for their use in accordance with current directions of the manufacturer.