## 2007

## Maryland Horticulture Industry Economic Profile



United States Department of Agriculture


National Agricultural Statistics Service


## ACKNOWLEDGMENTS

This study was funded by the Maryland Nursery and Landscape Association. Data collection, statistical analysis, and report development were completed by the USDA's National Agricultural Statistics Service (Maryland State Office), with assistance from the Maryland Department of Agriculture, Plant Protection and Weed Management Section.

We wish to thank all members of the nursery community who responded to the survey and to express a special note of gratitude to Jim McWilliams, Vanessa Finney, John Peter Thompson, Ron Jayne, and George Mayo of the Maryland Nursery and Landscape Association for providing guidance throughout this project.

## EXECUTIVE SUMMARY

## The Horticulture Industry in Maryland

This, the third economic profile in the $1^{\text {st }}$ decade of the new millennium, provides the most comprehensive insight into the growth and strength of the horticulture industry in Maryland. The first survey, in 2000, provided baseline of information from which many management and leadership decisions could be based. The 2003 survey demonstrated the impact a drought year can have on industry growth.

The 2007 survey is the most comprehensive to date for the following reasons. The survey reflects the use of improved methodology advances by the NASS which more accurately accounts for sales. An unprecedented response rate from chain stores, whose impact was not fully developed in previous surveys, reveals a more complete view of the industry. Finally, the prevalence of affordable dynamic small business management tools may have improved the business owners' ability to more accurately and conveniently access the information requested by the survey. The survey includes a response for expected sales in 2008. The 2007 survey predates one of the most significant economic recessions in our nation's history by just a few months. This global economic event will no doubt have affected the actual sales in 2008.

Here are a few highlights from the 2007 statistical profile:
$>$ Gross receipts exceeded $\$ 1.96$ billion in 2007 and were expected to exceed $\$ 2.05$ billion in 2008

- Retail sales accounted for $49 \%$
- Landscape Installation and Maintenance accounted for $27 \%$
- Wholesale sales accounted for $22 \%$
- Other categories accounted for $2 \%$ ( $\$ 35.94$ million, impressive for $1 \%$ )
$>$ Herbaceous Perennials topped product sales
- Herbaceous Perennials $31 \%$ - $\$ 496.8$ million
- Woody Plants $22 \%$ - $\$ 352.5$ million
- Annuals $18 \%$ - $\$ 288.4$ million
- Specialty Greenhouse Products 6\% - $\$ 96.1$ million
- Aquatics 5\% - $\$ 80.1$ million
- Christmas Trees 8\%-\$128.2 million
- Other products $10 \%$ - $\$ 160.3$ million
> Maryland wholesale sales generated over $\$ 422$ million
$>$ Total area dedicated to nursery production and sales exceeds 20,800 acres, including 19 million square feet of covered (greenhouse) space.
$>$ Over 18,500 people were employed by the industry
- $59 \%$ are employed for over 150 days
- Average wage rate for laborers was $\$ 10.39 / \mathrm{hr}$ - well above federal minimum wage
$>$ Factors Limiting Growth
- Financial Resources/economy - a very important factor limiting growth
- Labor - an important factor limiting growth
- Competition - is also an important factor limiting growth

The conclusions stated in the survey demonstrate a modest profile of the "Green Industry" in Maryland. All of Maryland's annual and foliage plant producers are not included in the survey. Many landscape contractor "hardscape" activities are not included in the survey. And, the survey does not include the millions of dollars in economic activity generated by such events as the Mid-Atlantic Nursery Trade Show held in Baltimore each January.

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# Maryland Horticulture - 2007 <br> A Statistical Profile of the Horticulture Industry in Maryland 

## OBJECTIVE

The 2007 Maryland Horticulture Survey was conducted to measure the scope and impact of Maryland's horticultural industry. The survey quantifies the types of plants grown and sold in Maryland, the sources and destination of plant materials, the number of individuals employed in the industry, the tenure of operation, the value of land and equipment, and horticultural sales. This survey also identifies factors which may be impacting growth of the industry. One final objective was to provide a measure of change with the previous survey conducted in 2003.

## SURVEY DESIGN

Survey Sample. ${ }^{1}$ All licensed nursery operations in Maryland were included in the 2007 Horticulture Survey, for a total of 1,140 operations. This sample included 36 major chains, representing 860 of the licensed operations. Survey forms were sent to these 36 major chains and the remaining 1,104 licensed operations. Unlicensed businesses were not included in the survey. There were 28 major chain stores that reported, which represented 87 percent of the total outlet stores.

Any individual or business that grows or sells perennial plant material in Maryland must be licensed by the Maryland Department of Agriculture, Office of Plant Industries and Pest Management. This includes growers of plant materials, landscape contractors, retail sales operations, and plant brokers. No license is required for businesses that grow or import annual plants, interior plants, or tropical plants. This exemption includes cut-flower growers, orchards, flower shops, and turf growers; however, many of these operations chose to be licensed so that they could ship plants out of state.

What is a Horticultural Product? For the purpose of the 2007 Nursery Industry Survey, horticultural production included nursery plant production, brokerage services, landscape design, installation, maintenance, renovation, lawn care, fertilization, mowing, trimming, mulching, erosion control/hydroseeding, plant delivery, plant rentals, watering, irrigation, interior plant operations, tree work, tree moving, tree spraying, IPM, seeding, and sales of Christmas trees, floral greenery, and plugs. In the 2007 survey, planners decided also to include the sale of hardscape products and services related to hardscape installations.

The following items were not considered nursery items in the 2007 survey: gifts, Christmas shop sales, snow removal, lighting, consulting, drainage work, excavation, value added products, and sales of produce, mulch, soil, fertilizer and stone.

Data Collection. The data collection phase was preceded by survey publicity letters sent to all respondents and by advertisements in industry publications. Questionnaires were initially mailed to all potential survey respondents in early 2009 with a "second request" mailing in late spring. Non-respondents were telephoned; then a selected few surveys were visited in person, by field enumerators, for the final phase of data collection.

[^0]Data Analysis. Data were collected, compiled, analyzed, and summarized by the USDA - NASS - Maryland Field Office. Data were key entered using Viking software and analyzed using Statistical Analysis System (SAS) software. Survey responses were analyzed on a statewide and regional basis.

Estimation for Non-Response. Each sampled operation that did not respond was grouped into one of three categories based on type of operation (grower, landscaper, or retail sales) and into one of five categories based on size of operation (hobby, small, average, large, or colossal). Category designations were provided by nursery inspectors from the Maryland Department of Agriculture (MDA) based on their observations during inspection visits, and general knowledge of state horticulture operations that are licensed.

The assumption was made that responses received from completed questionnaires were representative of the population as a whole and that non-respondents would answer questions in a similar fashion. Therefore, if all or part of a questionnaire was left unanswered, it was assumed it was 'typical' of other operations with similar sales and type of business, and data were estimated accordingly.

Special attention was given to large operations. These businesses were estimated individually using data from the 2007 Census of Agriculture, the USDA-NASS database, and the MDA nursery license application. If this information was unavailable, estimates were made by calculating averages from similar operations.

## RESPONSE

Response to the 2007 Maryland Horticulture Survey was $72 \%$. Non-response consisted of those who refused or were businesses that could not be contacted. Out of the 817 surveys that responded to the survey, 696 were currently in business, 57 were out of business, and 64 were out of scope for this survey, which included 18 research and government facilities.

## RESPONSE

Of the total 817 respondents in business, the top five counties were Baltimore, Montgomery, Anne Arundel, Prince George's and Carroll.


1. Allegany
2. Anne Arundel
3. Baltimore
4. Howard
5. Calvert
6. Caroline
7. Carroll
8. Cecil
9. Charles
10. Dorchester
11. Frederick
12. Garrett
13. Harford
14. Kent
15. Montgomery
16. Prince George's
17. Queen Anne's
18. Somerset
19. St. Mary's
20. Talbot
21. Washington
22. Wicomico
23. Worcester
(0) Top 5 Counties

## RESULTS AND SUMMARY OF THE SURVEY

## Sales of Horticultural Products and Services

Total gross receipts for Maryland licensed horticultural operations were $\$ 1.96$ billion in 2007. The retail sales sector accounted for $49 \%$ of the total receipts with sales surpassing $\$ 959$ million. The total gross sales increased $88 \%$ compared to the 2003 survey. NASS made extraordinary efforts to make the 2007 Horticulture Survey the most comprehensive survey ever conducted. Analysis shows that some of the marked increase in sales is based on methodological advances that allowed NASS to more accurately account for sales. The 2007 survey saw an increase in the number of licensed nursery operations in business compared to 2003. The major boost in retail sales was driven by an increase in chain store outlets.

Overall, licensed nursery operations in Maryland reported they expect a 5\% increase in total sales in 2008. The one sector with the largest anticipated increase was wholesale sales ( $9 \%$ ) followed by retail sales ( $7 \%$ ).

## Sales by Business Function



| Business Function | 2007 Sales |  | Expected 2008 Sales |  | Percent <br> Change <br> 2007- |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Dollars | Percent | Dollars | Percent | 2008 |
| Wholesale sales $^{2}$ | $422,490,890$ | $22 \%$ | $458,954,805$ | $22 \%$ | $+9 \%$ |
| Retail sales ${ }^{2}$ | $959,696,464$ | $49 \%$ | $1,031,382,766$ | $50 \%$ | $+7 \%$ |
| Landscape installation ${ }^{2}$ | $301,939,923$ | $15 \%$ | $307,556,398$ | $15 \%$ | $+2 \%$ |
| Landscape maintenance | $240,581,479$ | $12 \%$ | $225,541,359$ | $11 \%$ | $-6 \%$ |
| Other sales and products | $35,940,096$ | $2 \%$ | $30,173,831$ | $2 \%$ | $-16 \%$ |
| Total | $\$ 1,960,648,852$ | $100 \%$ | $\$ 2,053,609,159$ | $100 \%$ | $+5 \%$ |

[^1]
## Types of Plants Sold

Revenue related to the sale, installation and maintenance of herbaceous perennials totaled $\$ 497$ million in 2007. This represented $31 \%$ of all plant-related sales and services by licensed horticulture operations. Sales of woody plants were second at $\$ 353$ million; 22\% of all sales reported. Annual plant sales were next at $\$ 288$ million; 18\% of all sales reported.

Based on survey results, Maryland licensed horticulture operations expected the largest growth in sales for 2008 to be in woody plants. This expected $9 \%$ increase far exceeded increases for other plant types and product and service categories.

Sales by Plant Type


| Plant Type | 2007 Sales |  | Expected 2008 Sales |  | Percent <br> Change <br> 2007- <br> 2008 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Dollars | Percent | Dollars | Percent | 2 |
| Woody Plants | $352,579,562$ | $22 \%$ | $\$ 382,634,619$ | $23 \%$ | $+9 \%$ |
| Herbaceous Perennials | $496,816,655$ | $31 \%$ | $499,088,634$ | $30 \%$ | $+<1 \%$ |
| Annuals | $288,474,187$ | $18 \%$ | $299,453,180$ | $18 \%$ | $+4 \%$ |
| Aquatic Plants | $80,131,719$ | $5 \%$ | $83,181,439$ | $5 \%$ | $+4 \%$ |
| Specialty Greenhouse <br> Products | $96,158,062$ | $6 \%$ | $99,817,727$ | $6 \%$ | $+4 \%$ |
| Christmas Trees | $128,210,750$ | $8 \%$ | $133,090,302$ | $8 \%$ | $+4 \%$ |
| Other Products ${ }^{3}$ | $160,263,437$ | $10 \%$ | $166,362,878$ | $10 \%$ | $+4 \%$ |
| Total | $\$ 1,602,634,372$ | $100 \%$ | $\$ 1,663,628,780$ | $100 \%$ | $+4 \%$ |

[^2]
## Method for Plant Products Sold

Of the total 2007 plant-related sales reported by licensed horticulture operations, $70 \%$ or $\$ 1.12$ billion were for container-grown products (including all types of greenhouse production). Sales of field-grown products totalled $\$ 385$ million or $24 \%$ of total sales. Cut flower and other products made up a relatively small percentage of the total sales with $2 \%$ and $4 \%$, respectively.

Sales related to field-grown stock were expected to increase $8 \%$ in 2008 while container-grown stock sales were expected to increase $2 \%$. Increases in sales were also expected for both cut flowers and other products, with projected increases of $4 \%$.

Sales by Method of Preparation


| Method of <br> Preparation | 2007 Sales |  | Expected 2008 Sales |  | Percent <br> Change <br> 2007- <br> 2008 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Dollars | Percent | Dollars | Percent |  |
| Field Grown | $384,632,250$ | $24 \%$ | $415,907,195$ | $25 \%$ | $+8 \%$ |
| Container | $1,121,844,060$ | $70 \%$ | $1,147,903,858$ | $69 \%$ | $+2 \%$ |
| Cut flower | $32,052,687$ | $2 \%$ | $33,272,576$ | $2 \%$ | $+4 \%$ |
| Other | $64,105,375$ | $4 \%$ | $66,545,151$ | $4 \%$ | $+4 \%$ |
| Total | $\$ 1,602,634,372$ | $100 \%$ | $\$ 1,663,628,780$ | $100 \%$ | $+4 \%$ |

## Source of Plant Material Sold

The 2007 survey identified significant changes in the sources of plant material sold. Survey results indicated a shift away from the importation of plant material from other states towards the purchase of plants from Maryland nurseries or growing plant materials on their own operations. About $33 \%$ of the Maryland nursery crop is grown from start to finish and sold directly from the farm. Approximately $37 \%$ of the Maryland nursery crop is purchased from another Maryland nursery finished; this was an increase of $72 \%$ from the 2003 survey. A very small amount (1\%) was imported from outside the United States.

## Source of Plants Sold in Maryland



|  | Source of Plants Sold |  | 2007 Sales |  |
| :--- | :--- | ---: | ---: | :---: |
|  |  | Dollars | Percent |  |
| $\mathbf{1}$ | Grown entirely on the farm where produced | $528,869,343$ | $33 \%$ |  |
| $\mathbf{2}$ | Purchased from another Maryland nursery unfinished | $176,289,781$ | $11 \%$ |  |
| $\mathbf{3}$ | Purchased from another Maryland nursery finished | $592,974,717$ | $37 \%$ |  |
| $\mathbf{4}$ | Imported from another state unfinished | $128,210,750$ | $8 \%$ |  |
| $\mathbf{5}$ | Imported from another state finished | $160,263,437$ | $10 \%$ |  |
| $\mathbf{6}$ | Imported from outside the U.S. | $16,026,344$ | $1 \%$ |  |

## Destination of Plants Shipped

A total of 306 licensed Maryland nurseries reported shipping plant material. Woody plants were shipped by $27 \%$ of respondents ( 84 producers). Herbaceous perennials were shipped by 81 producers; annuals were shipped by 63 producers; aquatic plants were shipped by 15 producers; and 63 producers shipped other goods such as seed, and bulbs, Christmas trees, and specialty greenhouse products.

Most of the plant material was shipped within the state. The remaining material was shipped primarily to the Eastern or Southern United States. A small amount of plant material was shipped to Canada and Other countries.

## Destination of Plants Shipped



| $\square$ Woody Plants | Herbaceous Perenniels <br> Annuals <br> $\square$ Aquatic Plants <br> $\square$ <br> Other Products |
| :--- | :--- |
| $\square$ Christmas Trees |  |


|  | Percent of plants (by type) shipped to each destination |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | MD | Eastern <br> U.S. | Southern <br> U.S. | Central <br> States | Western <br> States | Canada | Other <br> countries |
| Woody plants | $78 \%$ | $10 \%$ | $6 \%$ | $2 \%$ | $3 \%$ | $1 \%$ | $<1 \%$ |
| Herbaceous perennials | $82 \%$ | $9 \%$ | $3 \%$ | $3 \%$ | $2 \%$ | $1 \%$ | $<1 \%$ |
| Annuals | $80 \%$ | $8 \%$ | $5 \%$ | $4 \%$ | $3 \%$ |  |  |
| Aquatic plants | $44 \%$ | $14 \%$ | $14 \%$ | $14 \%$ | $14 \%$ |  |  |
| Specialty Greenhouse <br> Products | $80 \%$ | $8 \%$ | $4 \%$ | $4 \%$ | $4 \%$ |  | $<1 \%$ |
| Christmas Trees | $80 \%$ | $7 \%$ | $7 \%$ | $3 \%$ | $3 \%$ |  |  |
| Other products ${ }^{4}$ | $73 \%$ | $10 \%$ | $7 \%$ | $7 \%$ | $3 \%$ |  | $<1 \%$ |
| Eastern States include ME, VT, NH, MA, CT, RI, NY, PA, DE, NJ, VA, WV <br> Southern States include SC, GA, AL, FL, AR, LA, MS, NC, TN, TX, OK, PR |  |  |  |  |  |  |  |
| Centra States include OH, MI, WI, IN, IL, IA, NE, KS, MO, ND, SD, MN, KY |  |  |  |  |  |  |  |
| Western states include AK, WA, OR, ID, MT, WY, NV, UT, CO, NM, CA, AZ, HI |  |  |  |  |  |  |  |

${ }^{4}$ Other products include items such as seeds, bulbs, etc., and any other sales related to other products not previously listed.

## Total Acreage and Covered Growing Space

Licensed horticultural operations reported 20,879 acres used for nursery production and sales in 2007. This included 19.0 million square feet of covered space. Acreage includes all production, sales, and holding areas. Of the total covered space, $84 \%$ of the area was in film plastic greenhouses, hoop houses, or over-winter poly houses. Glass greenhouses and rigid plastic greenhouses accounted for $13 \%$ of the total covered area. The value of the total acreage reported by licensed horticulture operations (including their structures and equipment) totaled close to $\$ 1$ billion.

Covered Growing Space by Type


| Covered Growing Space | Total Space (ft ${ }^{2}$ ) | Percent of <br> Total |
| :--- | ---: | ---: |
| Glass greenhouses | $1,900,000$ | $10 \%$ |
| Rigid plastic greenhouses | 570,000 | $3 \%$ |
| Film plastic greenhouses, hoop houses, over-winter poly houses | $15,960,000$ | $84 \%$ |
| Shade houses | 190,000 | $1 \%$ |
| Other covered space | 380,000 | $2 \%$ |

## Number of Horticulture Workers and Wages

In 2007, there were 18,588 workers employed by Maryland's state-licensed nursery and landscape businesses. Over half ( $59 \%$ ) of the industry employees were employed for at least 150 days and the remainder were seasonal workers. Total wages paid by the sampled population in 2007 were $\$ 451$ million and labor overhead totaled $13.2 \%$. The labor overhead includes items such as payroll taxes, workers' compensation, benefits, and other costs of hiring and processing foreign labor. On average, laborers were paid $\$ 10.39$ per hour, supervisors were paid $\$ 15.99$ per hour, and managers were paid $\$ 21.70$ per hour. ${ }^{3}$ Out of the 18,588 total workers employed, 3,143 workers were reported as migrant workers, who were either foreign or domestic. Of this total, 365 were enrolled in the H2A program, and 892 were enrolled in the H2B program.

Horticulture Worker Wages


## Tenure

Nursery and landscape businesses have a long history in Maryland. The average Maryland nursery has been in business for 25.2 years. Close to $75 \%$ of the nursery operations are family owned and operated. The oldest family nursery operation opened over 150 years ago.

[^3]
## Industry Concerns

The 2007 Horticulture Industry Survey asked respondents to list the most important factors that limit growth or were problematic to their business. The results from the 2007 survey indicated that five factors affected their growth or were potential obstacles. These factors were financial resources/economy, labor, competition, taxes, and weather. The two most often cited were economy and labor while competition was the third most common response.

Factors Limiting Growth


| Factors Limiting Growth | Number <br> Responding | Percent of <br> Respondents |
| :--- | :---: | :---: |
| Financial Resources/ | 183 | $41 \%$ |
| Economy | 126 | $29 \%$ |
| Labor | 49 | $11 \%$ |
| Competition | 42 | $10 \%$ |
| Taxes | 41 | $9 \%$ |
| Weather |  |  |

## REGIONAL PROFILES OF HORTICULTURE IN MARYLAND

Maryland was divided geographically into five regions - the mountainous Western region, a Central urban core, Southern Maryland and rural counties on the Eastern Shore. Regions defined for the 2007 Horticulture Survey correspond to Maryland Crop Reporting Districts (as defined by USDA-Maryland Agricultural Statistics Service). The Western region includes Allegany and Garrett counties; the Central region includes Baltimore, Carroll, Frederick, Harford, Howard, Montgomery, and Washington counties; the Southern region includes Anne Arundel, Calvert, Charles, Prince George's and St. Mary's counties; the Upper Shore region includes Caroline, Cecil, Kent, Queen Anne's, and Talbot counties; and the Lower Shore region includes Dorchester, Somerset, Wicomico, and Worcester counties.

| Western Maryland |
| :--- |
| Central Maryland |
| Southern Maryland |
| Upper Shore |
| Lower Shore |



## Sales by Region

The Central region, which includes the areas around the cities of Baltimore and Washington, D.C., leads the state in the value of horticulture sales and services. In 2007, state-licensed companies in this region had $\$ 373$ million in landscape sales. Central Maryland represented a large portion of wholesale plant sales ( $\$ 282$ million) as well. Southern Maryland ranked second in terms of total sales of plants and products and services.

Over $\$ 851$ million $^{4}$ in total sales of horticultural plants, products, and services could not be classified by region because either they were reported by large chain stores with multiple locations statewide or by large companies unable to provide a regional breakout of sales.


[^4]
## Sales of Horticulture Products by Business Function by Region

Most of the horticultural retail and landscape sales were made in the urban central region of the State. There were also large numbers of plants grown and sold wholesale here. Wholesale production was also significant on the upper Eastern Shore.

|  | Western <br> Maryland | Central <br> Maryland | Southern <br> Maryland | Upper <br> Eastern <br> Shore | Lower <br> Eastern <br> Shore | Businesses <br> operating <br> statewide |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Wholesale sales | $3,356,383$ | $281,631,549$ | $23,934,671$ | $84,896,796$ | $23,863,152$ | $4,808,339$ |
| Retail sales | 731,000 | $58,405,669$ | $47,750,995$ | $9,941,179$ | $2,860,772$ | $840,006,849$ |
| Landscape installation/ <br> maintenance | $4,390,300$ | $372,529,377$ | $119,112,704$ | $24,076,714$ | $16,204,081$ | $6,208,226$ |
| Other sales and products | 491,400 | $27,940,833$ | $5,919,537$ | $1,335,256$ |  | 253,070 |

## Regional Wholesale Horticulture Sales



## Regional Retail Horticulture Sales



Regional Landscape Installation and Maintenance Sales


## Regional Other Sales and Products



## Labor and Wages by Region

In 2007, 18,588 workers were employed in Maryland's nursery and landscape industries. The Central region led the State with 7,348 of the horticultural workers employed by state licensed operations and in second was the Southern region with 3,712 workers. Chain stores and nurseries located in multiple regions employed 3,188 . The remaining 4,340 workers were employed in the Western, Upper Eastern Shore and Lower Eastern Shore regions. Nearly $41 \%$ of all workers employed by the industry worked on a part-time basis (less than 150 days) in 2007.

| Regions | Number of <br> Workers Employed <br> Less than 150 Days | Number of <br> Workers Employed <br> 150 Days or More | Total Number of <br> Workers Employed <br> in 2007 |
| :--- | ---: | ---: | ---: |
| Western Maryland | 66 | 99 | 165 |
| Central Maryland | 2,793 | 4,555 | 7,348 |
| Southern Maryland | 1,374 | 2,338 | 3,712 |
| Upper Eastern Shore | 2,058 | 1,384 | 3,442 |
| Lower Eastern Shore | 271 | 462 | 733 |
| Statewide Businesses | 1,008 | 2,180 | 3,188 |
| Total | 7,570 | 11,018 | 18,588 |

Number of Horticulture Workers by Region


Total wages paid by the horticultural industry in 2007 were $\$ 451$ million. The majority of the wages paid were in Maryland's Central region accounting for $\$ 179$ million of all wages paid by State licensed businesses. In Southern Maryland, wages totaled just over $\$ 76$ million. Statewide, chain stores and operations located in multiple regions paid horticultural workers an estimated $\$ 99$ million.

| Regions | Total Wages |
| :--- | ---: |
| Western Maryland | $\$ 2,741,183$ |
| Central Maryland | $\$ 179,320,108$ |
| Southern Maryland | $\$ 76,406,265$ |
| Upper Eastern Shore | $\$ 77,780,632$ |
| Lower Eastern Shore | $\$ 15,461,974$ |
| Statewide Businesses | $\$ 99,155,365$ |
| Total | $\$ 450,865,527$ |

## Horticulture Workers

## Average Salaries


$\square$ Laborers
$\square$ Supervisors
$\square$ Managers

## Acreage in Horticultural Crops

Total nursery production and sales area in 2007 totaled 20,879 acres, including 20,443 acres in open ground and 19.0 million square feet ( 436 acres) in covered space. Nearly $76 \%$ of the open land was located in the Central region and Upper Eastern Shore. Central region businesses reported 9,462 acres of open ground and over 5 million square feet of covered space. The Upper Eastern Shore had 6,146 acres of open ground and nearly 5 million square feet of covered space.

| Region | Open Land (acres) | Covered Space (ft²) |
| :--- | ---: | ---: |
| Western Maryland | 1,139 | 53,767 |
| Central Maryland | 9,462 | $5,275,348$ |
| Southern Maryland | 2,110 | $2,440,903$ |
| Upper Eastern Shore | 6,146 | $4,867,862$ |
| Lower Eastern Shore | 1,546 | $6,329,741$ |
| Statewide Operations | 40 | 32,379 |

Acreage in Horticulture Crops
by Region

$(6,146)$

## Western Maryland

Allegany, Garrett Counties

| Sales |  |  |
| :--- | ---: | :---: |
| All Sales of horticulture products and services - 2007 | $\$ 8,969,083$ |  |
| Wholesale | $37 \%$ | $\$ 3,356,383$ |
| Retail | $8 \%$ | $\$ 731,000$ |
| Landscape installation/maintenance | $49 \%$ | $\$ 4,390,300$ |
| Other | $6 \%$ | $\$ 491,400$ |
|  |  |  |
| Land | 1,139 acres |  |
| Area in production (open ground) |  |  |
| Wages | $\$ 2,741,183$ |  |
| Total Wages paid to horticulture workers - 2007 | $\$ 8.44$ |  |
| Average wage rate: | Laborers | $\$ 13.30$ |
|  | Supervisors | $\$ 14.40$ |
| Labor | Managers | 99 |
| Number of horticulture workers: | Full-time | 66 |

## Horticulture Sales by Type Western Maryland



## Central Maryland

Baltimore, Frederick, Carroll, Harford, Howard, Montgomery, Washington Counties

| Sales |  |  |
| :--- | ---: | :--- |
| All Sales of horticulture products and services - 2007 | $38 \%$ | $\$ 281,631,549$ |
| Wholesale | $8 \%$ | $\$ 58,405,669$ |
| Retail | $50 \%$ | $\$ 372,529,377$ |
| Landscape installation/maintenance | $4 \%$ | $\$ 27,940,833$ |


| Land |  |  |
| :--- | :--- | ---: |
| Area in production (open ground) | 9,462 acres |  |
| Wages |  |  |
| Total Wages paid to horticulture workers |  |  |
| Average wage rate: | Laborers | $\$ 179,320,108$ |
|  | Supervisors | $\$ 10.73$ |
|  | Managers | $\$ 16.27$ |
| Labor | Full-time | $\$ 23.05$ |
| Number of horticulture workers: | Seasonal | 4,555 |
|  |  | 2,793 |

## Horticulture Sales by Type Central Maryland



Anne Arundel, Calvert, Charles, Prince George's, St. Mary's Counties

| Sales |  |  |
| :--- | :---: | :--- |
| All Sales of horticulture products and services - 2007 | $12 \%$ | $\$ 196,717,907$ |
| Wholesale | $24 \%$ | $\$ 47,754,671$ |
| Retail | $61 \%$ | $\$ 119,112,704$ |
| Landscape installation/maintenance | $3 \%$ | $\$ 5,919,537$ |


| Land |  |  |
| :--- | :--- | ---: |
| Area in production (open ground) | 2,110 acres |  |
| Wages |  |  |
| Total Wages paid to horticulture workers |  |  |
| Average wage rate: | Laborers | $\$ 76,406,265$ |
|  | Supervisors | $\$ 10.06$ |
|  | Managers | $\$ 15.68$ |
| Labor |  | $\$ 20.33$ |
| Number of horticulture workers: | Full-time | 2,338 |
|  | Seasonal | 1,374 |

## Horticulture Sales by Type Southern Maryland



| Sales |  |  |
| :--- | ---: | :--- |
| All Sales of horticulture products and services - 2007 | $71 \%$ | $\$ 120,249,945$ |
| Wholesale | $8 \%$ | $\$ 9,996,796$ |
| Retail | $20 \%$ | $\$ 24,076,714$ |
| Landscape installation/maintenance | $1 \%$ | $\$ 1,335,256$ |

## Land

Area in production (open ground) 6,146 acres

| Wages |  |  |
| :--- | :--- | ---: |
| Total Wages paid to horticulture workers | 2007 | $\$ 77,780,632$ |
| Average wage rate: | Laborers | $\$ 9.98$ |
|  | Supervisors | $\$ 14.91$ |
|  | Managers | $\$ 20.21$ |
| Labor |  | 1,384 |
| Number of horticulture workers: | Full-time | 2,058 |

## Horticulture Sales by Type <br> Upper Eastern Shore



## Lower Eastern Shore

Dorchester, Somerset, Worcester, Wicomico Counties

| Sales |  | $\$ 42,928,005$ |
| :--- | ---: | ---: |
| All Sales of horticulture products and services - 2007 | $56 \%$ | $\$ 23,863,152$ |
| Wholesale | $6 \%$ | $\$ 2,860,772$ |
| Retail | $38 \%$ | $\$ 16,204,081$ |
| Landscape installation/maintenance |  |  |
|  |  |  |
| Land | 1,546 acres |  |
| Area in production (open ground) | $\$ 15,461,974$ |  |
| Wages | $\$ 8.97$ |  |
| Total Wages paid to horticulture workers |  |  |
| Average wage rate: | Laborers | $\$ 13.52$ |
|  | Supervisors | $\$ 17.12$ |
| Labor | Managers | 462 |
| Number of horticulture workers: | Full-time | 271 |

## Horticulture Sales by Type <br> Lower Eastern Shore



# 2007 MARYLAND HORTICULTURE SURVEY <br> USDA - Maryland Agricultural Statistics Service 50 Harry S Truman Drive Annapolis, MD 21401 

Dear Green Industry Professional,
This survey is being conducted by the USDA's National Agricultural Statistics Service to document the current growth, scope and impact of the Maryland Green Industry, including Garden Centers.

The survey is being sent to all licensed nursery and landscape operations in Maryland. If you do business at more than one location, please combine the data for all locations on one questionnaire. Include sales from Maryland locations only.

Response to the survey is voluntary; however, your response is important to ensure reliable results. The information you provide is kept confidential and used only in combination with other reports to produce State or regional results.

Please return your report in the enclosed postage paid envelope. If you have any questions, please do not hesitate to give me a call. We appreciate your help in this important effort.

Sincerely,


Barbara Rater
Maryland State Director

## SECTION 1 - Type of Operation

1. Did you produce or sell nursery or greenhouse crops or provide landscape services during 2007 ?

| $\square$ | Yes [Continue Below] |
| :--- | :--- |$\quad$| No [skip to page 4, question 25] |
| :--- |

2. Which of the following categories BEST describes your business (check one):


Grower - wholesale only
Landscaper and/or Interiorscaper (installation only)
Landscaper and/or Interiorscaper (maintenance only)
Landscaper and/or Interiorscaper (installation/ maintenance)

| $\square$ | Grower - retail and/or wholesale |
| :--- | :--- |
| Horticulture distributor or re-wholesale |  |
| Retail sales |  |
| Other (Please specify) |  |

3. How many years has this business been in operation? ..................................................................... 200
4. Is this operation a Family Owned Business? (Circle one)

YES NO

## SECTION 2 - Gross Sales

5. What were your total gross sales from nursery or greenhouse crops and landscaping? (Including hardscapes e.g. walkways, irrigation systems, decks etc. )

| 2007 | Projected 2008 |
| :--- | :--- |
| 300 | 300 |

## SECTION 2 - Gross Sales (continued)

6. What PERCENT of your total sales were from:

2007
Projected 2008
a) wholesale (plant sales)
b) wholesale (hardscape sales only)
c) retail (plant sales)
d) retail (hardscape sales only).
e) landscape/interiorscape installation - (excluding hardscape)
f) landscape/interiorscape installation - (hardscape only)
g) landscape/interiorscape maintenance
h) other (please specify)
(Percentages should add to 100\%)
7. What percent of your plant sales were by the following categories?

| 2007 |  | Projected 2008 |
| :---: | :---: | :---: |
| 400 |  | 408 |
| 401 |  | 409 |
| 402 |  | 410 |
| 403 |  | 411 |
| 404 |  | 412 |
| 405 |  | 413 |
| 406 |  | 414 |
| 407 |  | 415 |
|  | 100 \% | 100 \% |
|  |  | Projected 2008 | (include plants installed and maintained)

a) Woody plants
b) Herbaceous perennials
c) Annuals
d) Aquatic Plants
e) Specialty greenhouse (house plants \& tropicals)
f) Christmas trees
g) Other (e.g. seeds, sod, bulbs) $\qquad$

| 450 | 457 |
| :--- | :--- |
| 451 | 458 |
| 452 | 459 |
| 453 | 460 |
| 454 | 461 |
| 455 | 462 |
| 456 | 463 |
|  | $100 \%$ |

8. What percent of your sales were by the following methods? (include plants installed and maintained)

| 2007 | Projected 2008 |
| :--- | :--- |
| 500 | 504 |
| 501 | 505 |
| 502 | 506 |
| 503 | 507 |
|  | $\mathbf{1 0 0 \%}$ |

a) Field Grown (include aquatic plants)
b) Containers (all types including greenhouse production)
c) Cut Flowers
d) Other (please specify)
(Percentages should add to 100\%)
9. Of the plants sold or installed in 2007, what percent were

| a) | grown entirely on your farm/nursery. | 550 |
| :---: | :---: | :---: |
| b) | purchased from another Maryland nursery and finished by you | 551 |
| c) | purchased from another Maryland nursery completely finished | 552 |
| d) | imported from another state and finished by you. | 553 |
| e) | imported from another state completely finished | 554 |
| f) | imported from outside the USA | 555 |
|  | (Percentages should add to 100\%) | $100 \%$ |

10. Did you wholesale and/or re-wholesale materials to customers in 2007?
$\square$ Yes [Continue] $\quad \square$

No [skip to Section 4, question 12]
11. Please enter the percent of your 2007 sales by plant material category sold to each region identified in the table below.

| States | Woody Plants | Herbaceous Perennials | Annuals | Aquatic Plants | Specialty Greenhouse | Christmas Trees | Other (e.g. seeds, sod, bulbs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maryland | 701 | 702 | 703 | 704 | 705 | 706 | 707 |
| Eastern States | 708 | 709 | 710 | 711 | 712 | 713 | 714 |
| Southern States | 715 | 716 | 717 | 718 | 719 | 720 | 721 |
| Central States | 722 | 723 | 724 | 725 | 726 | 727 | 728 |
| Western States | 729 | 730 | 731 | 732 | 733 | 734 | 735 |
| Canada | 736 | 737 | 738 | 739 | 740 | 741 | 742 |
| Other Countries: |  |  |  |  |  |  |  |
|  | 743 | 744 | 745 | 746 | 747 | 748 | 749 |
|  | 750 | 751 | 752 | 753 | 754 | 755 | 756 |

## SECTION 3- Wholesale Sales and Shipping

NOTE: Eastern States include CT, DC, DE, MA, ME, NH, NJ, NY, PA, RI, VT, WV
Southern States include AL, AR, FL, GA, KY, LA, MS, NC, OK, Puerto Rico, SC, TN, TX, VA
Central States include IA, IL, IN, KS, MI, MO, MN, ND, NE, OH, SD, WI
Western states include AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

## Section 4 - Land, Buildings, and Equipment

12. What is your estimate of the current market value of land, structures and equipment used

## 800

 (owned and/or rented) in your operation as of December 31, 2007 ?13. What was the total acreage your operation owned and/or rented for nursery sales and production in 2007? (Including all production, sales, and holding areas) $\qquad$
$\square$
1
. Considering the total acreage in 2007, did your operation have any greenhouses, polyhouses or other covered space?
 No [skip to question 16]
14. Please indicate type and area of covered space in use in 2007. (Include covered space used for holding, selling, or finishing product.)

|  | Square Feet |
| :---: | :---: |
| a) Glass greenhouses.. | 901 |
| b) Rigid plastic greenhouses. | 902 |
| c) Film plastic greenhouses, hoop houses, or over winter poly house (single or multi-layer) | 903 |
| d) Shade houses.. | 904 |
| e) Other (please specify) | 905 |

16. List the Maryland counties where your operation is located. If your operation is in more than one county, list the total acreage in each county. (report acreage to the nearest whole number)

| COUNTY | ACREAGE |
| :--- | :--- |
| 120 | 121 |
| 122 | 123 |
| 124 | 125 |

## SECTION 5 - Labor

17. What was the TOTAL number of workers employed by this operation during 2007 ? $\qquad$
a) Of these workers, how many were paid for working 149 days or less?

131
b) Of these workers, how many were paid for working 150 days or more?

132
18. Of these workers (item 17), how many were foreign laborers or migrant workers?
a) How many workers from the total above (item 18) were from the H 2 A program?
b) How many workers from the total above (item 18) were from the H 2 B program? $\qquad$
c) How many workers from the total above (item 18) were from other foreign or migrant worker programs? $\qquad$
19. What were the total gross wages paid by your operation during 2007? (Include employer's cost for social security, worker's compensation, insurance premiums and any other benefits provided).
21. During 2007, what was the average hourly wage for:
a) Labor overhead $\qquad$
$\square$
(e.g. payroll taxes, workers' comp,
139
benefits, other costs of hiring and processing foreign labor)

| a) Laborers | 135 |
| :---: | :---: |
| b) Supervisors | 136 |
| c) Managers | 137 |

22. How many UNPAID workers were on this operation in 2007? (Include family members, operators, and partners not paid a salary) $\qquad$

## SECTION 6 - Industry Factors

23. Please list the 3 most important factors that are limiting growth or are problematic for your business.

24. Is any of your land in a land preservation/conservation program? (Circle one) YES NO

## SECTION 7 - Conclusion

25. Would you like a copy of the survey results? (Circle one) YES NO

## Please share with us any comments on issues affecting your industry:



# Maryland Agricultural Statistics Service STAFF 

Rater, Barbara, Director
Hawks, Dale P., Deputy Director


Estimates, Surveys, LSF and Data Processing
Averill, Travis
Dawson, Amanda
Eyler, Judy
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Norris, Nicole
Sellman, Sheldaria
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For additional information and statistical data pertaining to the agricultural industry gathered by the State of Maryland or United States Department of Agricultural, write or call:

# NATIONAL AGRICULTURAL STATISTICS SERVICE <br> Maryland Field Office 

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[^0]:    ${ }^{1}$ Because of the nature of state licensing, many "Green Industry" producers and businesses are not included in this survey. Therefore, it is understood that the conclusions contained in this document offer an incomplete profile of the entire "Green Industry" in Maryland.

[^1]:    ${ }^{2}$ Wholesale, retail, and landscape installation include sales for plant and hardscape products such as walkways, irrigation systems, decks, etc.

[^2]:    ${ }^{3}$ Other products include items such as seeds, bulbs, etc., and any other sales related to other products and services not previously listed.

[^3]:    ${ }^{5}$ The estimates for average wages are simply averages for all licensed operations that reported a wage rate with no consideration for the number of workers employed.

[^4]:    ${ }^{6} \$ 851$ million is not included in regional distribution pie chart.

