

Floriculture & Nursery Crops YEARBOOK -- SUMMARY  
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## SUMMARY

### DEMAND FOR ORNAMENTAL CROPS WAS WEAK, AS EXPECTED

Although greenhouse and nursery crops are the fourth largest crop group based on farm cash receipts, its growth is flat, at least for 2003. While larger crop groups--corn, vegetables, and soybeans--continue to grow in sales value, ornamental crops, which include floriculture and nursery products, are experiencing a decline in the number of growers and average sales per acre of production area. With respect to floriculture crops, average sales per grower continue to rise as fewer farm operations become bigger. The addition of more open-field production area to existing farm acreage, while keeping greenhouse and covered acreage unchanged, has caused average floriculture sales per acre to fall. Only growers in the Midwest raised their sales per acre in 2003, particularly Missouri, Kansas, Michigan, Wisconsin, and Ohio.

Greenhouse and nursery crops constitute a third of the total farm cash receipts from horticulture crops, which include vegetables, fruits, and tree nuts. Cash receipts for greenhouse and nursery crops are estimated at \$14.3 billion in 2003, 1 percent below 2002's value. Only vegetables among domestic horticulture crops are expected to boost sales value in 2003. Continued larger imports of produce, processed fruits and vegetables, and cut flowers and nursery stock raise competitive pressure on domestic producers. While ornamental crops are only a small portion of total horticulture imports, their value amounted to \$1.2 billion in 2003, up from only \$530 million in 1990. USDA projections show ornamental imports reaching \$1.4 billion in 2004.

Lower sales of greenhouse and nursery crops in 2003 reflect both weak domestic demand and more intense import competition. Although U.S. consumption of ornamental crops was unchanged in

2003 as higher imports offset smaller domestic production, consumption per household dropped to \$140 from \$142 in 2002. Of this amount, \$54 were spent on floriculture crops, and the rest on nursery and other greenhouse crops. In turn, of the \$54 spent, \$9 were used to purchase cut flowers and \$45 for flowering and foliage plants. The fastest growing sector in the ornamental crop market are flowering and foliage plants, which include bedding, garden, and indoor plants. Because of import restrictions on plants with soil attached to roots, except plants from Canada, these products have become the bread and butter of U.S. floriculture growers.

Besides the top three producers of ornamental crops--California, Florida, and Texas--North Carolina and Oregon are close to reaching \$1 billion in annual green sales. Both of these States produce about \$800 million worth of nursery and greenhouse crops and only between \$100 and \$200 million of floriculture crops. Emerging competitors are Michigan and Ohio, which, by contrast, produced between \$200 and \$400 million of floriculture crops in 2003. These Midwestern States are leading producers of bedding and garden plants, both annuals and perennials, in large part due to increased greenhouse production. Michigan and Ohio are not far behind Texas in total greenhouse acreage. While Florida remains the predominant supplier of indoor foliage plants east of the Mississippi River, upcoming suppliers include North Carolina, Ohio, and Louisiana.

Despite the advantages offered by year-round greenhouse production of ornamental crops, greenhouses are expensive to build and operate, particularly with respect to higher fuel costs for heating. In addition, as overall demand for ornamental crops has weakened, growers have increasingly resorted to open-field production, attested to by the 18-percent jump in open-field acreage that floriculture farmers planted in 2003. The quest for larger market share appears to be driving the growers, who now average more than \$1 million in floral sales a year, up from \$980,300 in 2002.

**FLORICULTURE SALES PER ACRE OF PRODUCTION AREA ARE DOWN BUT SALES PER GROWER ARE UP**

Among floriculture crop groups, only bedding and garden plants and propagative materials registered an increase in sales value in 2003. While some switching of production from cut flowers to annual and perennial flowering plants is occurring due to import

competition, overall demand for ornamental crops appears weak. Total greenhouse and nursery crops, which include floriculture crops, are down in 2003, indicating that discretionary spending on these largely optional purchases is being curtailed despite growing personal incomes. In spite of brisk residential construction and resale of existing homes, the market for ornamental crops appears to have matured. This situation is reflected to some extent in the smaller number of floriculture crop growers and their hired workers.

Even as average floriculture sales of large growers (i.e., operations with more than \$100,000 in annual sales) rose slightly, average sales per acre of total production area dropped sharply to \$75,000 in 2003 from \$81,000 in 2002. This is because large farm operations have added more open field production than they reduced in greenhouse and shade-covered areas. The average covered production area for floriculture crops per large grower in 2003 was 4 acres, up from 3.9 acres in 2002. A decade ago, covered area per grower was half-an-acre smaller on average. Lower sales in 2003 and more mechanized open-field production require less workers, which is reflected in the 4,000-drop in the number of hired workers from 136,000 in 2002 to 132,000 in 2003.

It is also significant that, despite lower domestic production and sales of floriculture crops, U.S. consumption of these products actually increased in 2003. As imports of cut flowers, flowering, and foliage plants jumped from 2002, total supply grew accordingly, pushing total consumption up. Nevertheless, floriculture consumption per U.S. household remains at \$54, unchanged from 2002. Although the 13-percent import share of floriculture crop consumption is higher than in the past 2 years, it is still lower than in 1995-2000 when it averaged 15 percent.

Large growers located in Midwestern and Western States experienced incremental increases in floriculture sales, whereas growers in the Northeast and South suffered declines in 2003. Notwithstanding these recent sales patterns, operations in the Midwest and West actually reduced their total production areas from 2002, while operations in the Northeast and South enlarged theirs. Thus, sales value per acre in the Midwest and West grew relative to their counterparts in the Northeast and South.

Floriculture sales per grower increased on average in all four U.S. regions, growing the fastest in the Midwest as sales of bedding and garden annual flowering plants led growth. Operations in the South have the next fastest advance in sales per grower,

largely due to a 7-percent decline in the number of large growers from 1,706 in 2002 to 1,592 in 2003. The average size of farm operations in the West remains the largest at almost \$1.5 million in sales per grower, followed by Southern operations at \$1.1 million. By contrast, the average size of operations in the Northeast and Midwest is only around \$700,000. Growers in Connecticut sell the most at more than \$1.1 million each on average, followed by Michigan at \$914,000.

**CUT FLOWERS** -- Growers continue to switch fresh cut flower production from flowers which are highly imported to high-value varieties with less import competition. Flowers whose domestic production increased include delphinium, larkspur, gerbera daisy, gladioli, iris, lilies, orchids, and tulips. Nonetheless, lower U.S. production of roses, chrysanthemums, and carnations more than offset the gains in other cut flowers. As a result, overall unit values dropped even as the corresponding quantity sold fell.

The number of cut flower producers is down to 548 from 618 in 2002. Only growers of tulips and delphinium/larkspur grew in number. Average sales per grower increased with respect to mums, gerbera daisy, gladioli, iris, lilies, lisianthus, and orchids, which raised overall sales per grower to \$775,500 from \$691,000 in 2002.

**POTTED FLOWERING AND FOLIAGE PLANTS** -- With the exception of orchids and spring flowering bulbs, all other potted flowering plants recorded lower sales in 2003. As a result of a smaller number of growers compared with 2002, average sales per grower climbed to over \$375,000 from \$357,800. Growers of poinsettias, florist roses, Easter lilies, orchids, and spring bulbs all experienced higher average sales in 2003.

Orchids are the clear leader in sales growth among potted flowering plants over the past decade. Potted orchid sales reached \$121 million in 2003, second only to poinsettias, which had \$257 million in sales. However, as the number of orchid pots sold surged to 15.6 million from 13.3 million in 2002, unit prices slid from \$8.40 to \$7.80 per pot in 2003. Orchid supply was also augmented by imports worth \$6 million in 2003. It is evident that more growers are targeting the lucrative orchid market as fierce competition in selling other potted flowering plants such as poinsettias put downward pressure on their prices.

**BEDDING AND GARDEN PLANTS** -- Both annuals and perennials gained in sales in 2003. Among perennials, hardy/garden chrysanthemums and

hosta both increased sales in 2003. Among annuals, only geraniums from cuttings and vegetable types moved up in sales. Growers in all U.S. regions, except in the West, experienced gains in sales value despite less quantity sold in the Northeast and Midwest. Thus, part of the higher sales value stems from higher wholesale prices.

For annual bedding and garden plants, sales increased only for plants in pots and hanging baskets. Sales of annuals in flats, the largest source of sales receipts for bedding plant growers, were down in 2003 despite lower to flat unit prices. Only prices of geraniums from cuttings were up in 2003. As the number of growers fell in 2003, average sales per grower climbed to \$580,000 for annuals and \$246,000 for perennials.

U.S. ORNAMENTAL IMPORTS -- U.S. imports of cut flowers and nursery stock totaled \$1.25 billion in 2003, up 10 percent from \$1.1 billion in 2002. Imported cut flowers increased 13 percent from 2002, following 2 years of decline. Both import quantity and prices of cut flowers climbed in 2003. Nursery stock imports, including all ornamental crops and products except cut flowers, grew 8 percent to \$638.6 million, which is only slightly larger than \$611 million for imported cut flowers. This growth generally follows the strong import demand of most agricultural products in 2003.

Roses lead U.S. cut flower imports by a wide margin. Colombia is the major producer of these flowers, followed by Ecuador. For imports of live plants and trees, Canada is by far the biggest source due to restrictions pertaining to shipment of plants with soil attached to their roots from other countries. Unrooted cuttings and slips of plants are imported mainly from Costa Rica, Guatemala, and Mexico. Many flowering plants, including geraniums, originate as cuttings from growers in these Latin American countries. The growing market for orchid plants is supplied largely by Taiwan, followed by Thailand and the Netherlands. For flowering bulbs such as tulips and lilies, the Netherlands is the predominant supplier. Finally, most imported Christmas trees come from Canada.

The import share of U.S. consumption of fresh cut flowers is now 61 percent, up from 58 percent in 2002 and only 40 percent in 1989. This is the reason for the long-term downward trend in domestic cut flower production, particularly for roses, chrysanthemums, carnations, and gladioli. For total floriculture crops, the share of imports in consumption is much smaller at 13

percent because the import share for potted flowering plants, foliage, and bedding plants is only 3 percent. While U.S. imports of nursery stock, which include flowering bulbs, live plants, foliage, and Christmas trees, are now larger in value than cut flower imports, their share in consumption of nursery and other greenhouse crops is only 5 percent.