

GREEN INDUSTRY SITUATION AND OUTLOOK

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Current Green Industry Situation

Although grower receipts from greenhouse and nursery crops are expected to be up by less than 1 percent in 2004, they still represent another year of an unbroken series of annual sales increases. Sales of floriculture crops are also projected up slightly following a small decline in 2003. Among floriculture product groups, cut flowers, potted flowering plants, and cut cultivated greens experienced reduced sales in 2003, largely due to competition from imports, and sales are projected down again in 2004 even as most prices continue upward. Bedding and garden annual and perennial plants and propagative materials are the only floriculture crops whose sales are expected to be higher in 2004. Nursery crops are also forecast to extend annual sales gains in 2004, in part because of still-robust new housing construction.

An important reason that nursery crop sales remained healthy in 2003 compared with floriculture crops is the lower share of imports in nursery crop consumption. Relentless competition from imported cut flowers from South America has reduced domestic growers' U.S. market share to minority status. Per-household consumption of greenhouse and nursery crops of \$139 in 2004 represents the second year of decline since its peak in 2002, matching the pattern of floriculture crops. Nevertheless, the ornamental crop sector will post total sales in excess of \$15.3 billion in 2004, a value exceeded only by corn, soybeans, and vegetables among crops.

Sales of floriculture crops are projected to grow to \$5.1 billion in 2004, due largely to gains from bedding and garden plants which represent 48 percent of total floriculture sales. Bedding and garden annuals and herbaceous perennials are forecast up 1 percent in 2004 sales. This contrasts with declines in cut flowers, potted flowering and foliage plants, and cut cultivated greens as competing imports provide further incentives for growers to produce other higher value and specialty crops. Outsourcing cuttings and seedling production to lower-cost growers in Central America and Mexico is one way domestic producers are coping, however.

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 other 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.

Together with bedding and garden plants, nursery and other greenhouse crops are the only product groups expected to continue gains in per-U.S.-household sales. Their higher sales in 2004 more than offset the declines in the other groups. Including Christmas trees, greenhouse vegetables, vegetable transplants, and sod, sales of nursery and other greenhouse crops have continuously grown but have flattened in terms of per-U.S.-household sales at around \$93 since 2002. Given that this sector accounts for two-thirds of total greenhouse and nursery crop receipts, it is largely responsible for keeping per-household sales of ornamentals and other greenhouse crops at about \$139 in recent years.

CUT FLOWERS — After slipping in 2002, U.S. cut flower imports surged 13 percent to \$611 million in 2003 and are expected to similarly grow in 2004 based on year-to-date import values. As a result, U.S.-grown cut flower sales are forecast down 1 percent in 2004. Domestic sales would be more subdued if cut flower prices were lower. But, thus far, consumer prices for flowers and indoor plants are up 18 percent from 2003. And cut flower production in California, which accounts for 70 percent of U.S. production, is at best flat in 2004, even in view of higher prices. The projected decline in volume of domestic cut flowers sold in 2004 is cushioned to some extent by somewhat higher prices from 2003 when prices also were up. Overall sales of \$421 million in 2004 are down 1 percent from 2003. This drops sales per U.S. household to \$3.83, almost a whole dollar lower than \$4.72 in 1997. By contrast, cut flower imports per U.S. household are now almost \$6, matching 1998's level. Cut flowers comprise half of total U.S. floriculture and nursery stock imports. The share of imported cut flowers in total U.S. cut flower supply was 56 percent as recently as 2002. It is anticipated to jump to 63 percent in 2004. The number of cut flower producers in the United States was at a record low of 548 in 2003, down from 618 in 2002, and is expected to dwindle further. Given that the largest cut flower operations are located in the West, in particular California, they bear the brunt of competition from imports. Nevertheless, despite fewer producers, average cut flower sales per U.S. grower have been growing and now approach \$780,000 as the size of operations has expanded. By rank order, the largest average sales of growers are of roses (\$701,000), gladioli, gerbera daisies, lilies (all around \$500 million), tulips, and chrysanthemums (both about \$300 million). In average unit prices, the leaders are pompon mums at \$1.32 per bunch, orchids at \$.70 per bloom, and lilies at \$.64 per stem.

POTTED FLOWERING AND FOLIAGE PLANTS — A 1-percent drop in sales is projected for potted flowering and foliage plants in 2004 following a 2-percent decline in 2003. Sales of potted flowering plants are forecast at \$820 million and foliage plants at \$616 million in 2004, down from \$829 million and \$623 million in 2003. Competition from fast-growing imports, especially from Canada, and crop damage from hurricanes in Florida dampen sales prospects of domestic growers this year. Imports of orchid plants are also rising from Taiwan, Thailand, the Netherlands, South Korea, and Canada. Nevertheless, domestic grower sales per U.S. household of potted flowering plants have held steady at between \$7 and \$8, and between \$5 and \$6 for foliage plants, over the past decade. Florida dominates the foliage plant market, capturing 64 percent of total U.S. value in 2003. Prices of potted flowering plants have risen 6 percent on average since 2000, reflecting healthy demand for high-value varieties such as florist roses, florist azaleas, and spring flowering bulbs. Even prices of poinsettias, which account for 30 percent of total receipts from potted flowering plants in 2003, were up in the last 2 years. Prices of potted orchids, however, appear to be in a downward trend since 2000. The quantity of potted orchids sold jumped from 9.7 million in 2000 to 15.6 million in 2003, indicating robust demand. Although producers responded accordingly by boosting domestic orchid production, imported orchid plants have grown 70 percent in volume since 2000, providing ample competition to local growers.

BEDDING AND GARDEN PLANTS — This sector by far dominates U.S. floriculture sales. Bedding and garden annuals comprise 36 percent of the \$5.1 billion sales of floral crops in 2003. Together with herbaceous perennial plants, the share is boosted to 48 percent. And since this sector posted a 1-percent sales gain in 2003 compared with losses in cut flowers, potted flowering plants, and cut cultivated greens, it was enough to push total floriculture receipts up. This growth is expected to repeat in 2004 as total bedding and garden receipts reach at least \$2.424 billion, up \$23 million from 2003. Sales of bedding and garden annuals are forecast at \$1.823 billion in 2004, continuing annual gains since 2000. Herbaceous perennial sales are also projected up, exceeding sales of foliage plants for the first time and now rank second only to bedding and garden annuals. It is evident that growers are increasing production of annuals and perennials relative to other floriculture crops, more significantly in the Midwest and Northeast. Sales of annuals in flats were down in 2003 while potted annuals and in hanging baskets registered gains. Although floriculture sales per U.S. household will continue to decline, albeit marginally, household sales of bedding and garden plants are expected to remain at just over \$22, unchanged since 2002. Prices of

bedding and garden plants have been noticeably stable since 2000 as sales growth is matched by the pace of quantity sold. This price pattern is the effective average between weak prices of annuals and rising prices of perennials since 2001. For annuals, prices of potted plants and in hanging baskets show a slight upward slope in contrast to downward prices of bedding and garden plants in flats. Increased production of bedding and garden annuals in the Midwest is supported by higher overall prices. But production of herbaceous perennials, except potted hardy/garden mums, is shifting heavily to Southern States, specifically South Carolina.

U.S. ORNAMENTAL IMPORTS — Expected prices for imported cut flowers are up 10 percent, due in part to the weaker U.S. dollar and higher fuel costs for transport. U.S.-grown cut flower prices are up 3 percent, due also in part to higher fuel and energy costs and damage to Florida cut flower production by hurricanes in late summer. Import prices of cut flowers in 2004 are 15 percent higher than in 2000, after initially dropping 5 percent in 2002. Cut flower imports fell in 2001 and 2002 due to weak U.S. demand which was precipitated by the economic recession and stock market downturn. The share of imports in U.S. cut flower consumption is projected at a record 65 percent, up from 61 percent in 2003. In 1992, the import share was 20 points lower at 45 percent. The quantity of imported flowering and bedding plants, largely from Canada, are expected up 8 percent in 2004 based on strong shipments from January to July. However, lower prices for imported flowering, bedding, and foliage plants push the import value down somewhat from 2003. Ninety-four percent of U.S. imported cut flowers are from Colombia, Ecuador, the Netherlands, Mexico, Canada, and Costa Rica. Cut flower imports are dominated by roses at 35 percent of imports, chrysanthemums at 11 percent, and carnations at 10 percent. Imports of flowering plants from Asia, such as orchids, and nursery plants and trees from Canada limit wholesale prices that domestic growers can charge without losing market share. These help explain in part why wholesale prices of U.S.-grown potted flowering plants and bedding and garden plants are generally flat since 2000. But for growers in the Midwestern and Eastern States, prices have improved relative to some growers in the South and especially in contrast to growers in the West.

GROWERS AND GROWING AREA — While the projected increase in floriculture growers' sales in 2004 is modest, average sales per grower is expected to continue rising beyond \$1 million. This will happen only if the number of large growers diminishes again, suggesting further consolidation of operations and ownership. As grower sales expand, either total production area also expands, or sales per acre increases. In 2003, total U.S. floriculture production area increased largely due to Texas adding 10 times more open field production. Despite growth in open field production, average covered production area per large grower rose 3 percent to 4 acres from 3.9 in 2002. After climbing in 2002, the number of growers with at least \$100,000 in annual floriculture sales fell from 4,974 to 4,741 in 2003. Since total floriculture sales increased slightly in 2003, average sales per large grower now exceed \$1 million, up 5 percent from \$956,000 in 2002. The addition of significant open field production area by growers pushed total production acres to 57,507 acres in 2003 from 52,235 in 2002. However, since total production acreage grew faster than floriculture sales, average sales per acre dropped 9 percent from \$91,000 to \$83,000 in 2003. Floriculture sales per production acre are still highest in the Midwestern States at \$126,000. Growers in Minnesota lead the region at almost \$230,000 sales per acre. Nevertheless, the largest growers based on floral sales are in the West—average sales per grower in California now exceed \$1.8 million. While Southern States trail the West at \$1.1 million sales on average per grower, South Carolina tops the country at \$2.5 million sales per grower, dwarfing California's average. South Carolina is the biggest producer of herbaceous perennial plants, selling 12 percent of total U.S. production.

Green Industry Outlook

Nursery and greenhouse producers are facing both challenges and opportunities in today's marketplace. While breeders have provided new varieties at a dramatic pace in recent years, which has helped to keep the consumer interested in the industry's products, the demands of retailers are probably

having a greater influence in shaping the marketplace for all of those in the market channel, with the possible exception of the consumer. Indeed, retailers are competing for market share, and in their efforts, they are changing the picture of horticulture as seen by both the consumer to whom they sell and the producers from whom they buy.

At the consumer level, the marketplace can best be viewed as divided between so-called “traditional retailers” and mass marketers. Traditional retailers or “independents” would include retail florists, who tend to focus on cut flowers and cut flower arrangements for special occasions, and garden centers, which, in addition to their traditional inventories of trees and shrubs and, in recent decades, bedding and garden plants, are increasingly carrying more and more potted flowering and foliage plants.

On the mass market side of the ledger, supermarkets have become the primary vendors of everyday cut flowers for the home, as well as the everyday vendor for potted flowering plants. Increasingly, supermarkets are also being viewed as vendors of holiday flowers and plants purchased for gifts. Some supermarkets also carry foliage plants quite regularly, and some, in selected markets, have started to sell bedding/garden plants seasonally. Another mass marketer type would be the discount store; these retailers include the likes of Wal-Mart and financially-troubled Kmart and tend to focus on bedding and garden plants in the spring and potted flowering plants for Easter and Christmas. Some also include foliage plants in their offerings. In cases where these retailers have added perishable groceries to their mix (e.g., Wal-Mart SuperCenters and Super Kmart), they have also added cut flowers as part of the retail format. Target, which had been very involved seasonally in the bedding/garden plant market throughout the country, has reduced this involvement to Florida, California, and selected other southwestern states, where there is more of a year-round market and where they have built permanent garden centers alongside their stores. Nationally, Target maintains a small foliage plant display in most stores, and they carry blooming holiday plants for Easter and Christmas.

The other dominant mass marketer type is the home improvement/hardware/home center, dominated by Home Depot and Lowe's. These retailers focus on bedding and garden plants to accompany their lines of trees and shrubs and lawn and garden hard goods (garden tools, fertilizers and chemicals, lawn mowers, hoses and sprinklers, etc.), but they also carry both potted flowering and foliage plants on a weekly basis in established garden departments. At Easter and Christmas, these retailers also display racks of lilies and poinsettias throughout their stores.

CONSUMER TRENDS — The consumer is very divided by the various retail opportunities for nursery and floricultural products. First, it must be noted that there are very few retailers who carry a mix that is representative of all of the major industry segments (nursery crops, cut flowers, potted flowering plants, foliage plants, and bedding/garden plants). Hence, retailers practically force the avid consumer to shop among several retailer types to see the full array of product opportunities. There are some industry statistics to suggest that consumers are shopping around more and are spreading their purchases among more and more retailers. Secondly, retailers vary dramatically in the selection offered, as well as the qualities, quantities, and sizes in the products and services they provide. Hence, if the consumer has particular needs in mind, they may be forced to shop around to find their ideal retail offering. Certainly, pricing varies among the retailers, as well.

Working on the side of many retailers is the overall lack of knowledge of the majority of consumers about the industry's products. For mass marketers, the lack of knowledge of the average lawn and garden consumer makes retailing a generic selection of dominant varieties and colors quite acceptable, especially if the retailer is able to attract consumers through the lowest price. For the traditional retailer able to attract the flower or plant aficionado through better quality, wider selection, or better service, the niche opportunities provide their *raison d'être*. Yet, consumers increasingly report they are realizing that if they know what they want and they are looking for the bread-and-butter staples,

they can get a great deal by buying at mass marketers, as long as they get to the retailers as fresh product arrives.

PRODUCER CHALLENGES — The evolving marketplace has certain challenges for the grower. In many instances, buyers for mass marketers have added what must be considered artificial conditions to the buying arrangements. Some buyers have added “pseudo grades and standards” to plants based on shelving heights or personal preferences, rather than based on generally accepted plant-to-pot ratios; sometimes these conditions are set only to allow the retailer to better exhibit various differences among groups of plants being sold at different price points. Premium versus promotional plants being sold side-by-side provides an example. Ironically, such conditions *are* sometimes making it easier for the uninformed consumers to recognize differences for their dollars. However, growers are sometimes forced either to sell perfectly acceptable plants at discounts because their dimensions fail to measure up to a particular buyer’s prerequisites or to culturally curtail plant growth to keep plants within the standards.

Growers also are forced to choose among production strategies. On the one hand, growers producing for mass marketers typically will grow large quantities of a limited number of outputs in highly automated operations. On the other hand, growers producing for independents typically will grow fewer numbers of a wider selection of outputs in much less-automated surroundings. Such “either-or choices” are difficult to make, whether made from the marketplace or the production perspectives, and do not contribute to operating efficiency or business risk reduction.

CONSOLIDATION OF CUSTOMERS, MARKETS, AND BUYERS — Consolidation of retailers has also presented some not-so-obvious marketing challenges for growers. There are instances in the marketplace where buyers are placing real or suggested limits on producers about which competitors they can also sell to or on how much of a producer’s output they are willing to buy. The restraint of trade issues notwithstanding, such actions limit producer options. Growers rightfully want to spread their eggs among as many baskets as possible, but options are dwindling as certain chains account for greater market shares and as financial realities force smaller chains and/or independents from business.

In many markets, the big box chains often come onto the scene opening huge store numbers in a relatively short time. While this is the nature of mass markets, these actions, which have forced less organized retailers from the scene, have also had the effect of forcing producers to scramble to maintain any market opportunities to which they can sell. Sometimes the chains enter a new market and bring established supply relationships with them from distant locations, rather than developing new relationships with local producers. With alternative local retailers pressured, local growers often find themselves challenged to find an inviting market channel.

Conversely, as chains move from market to market, a number of buyers have asked growers to supply not only those stores that have been supplied in the past, but the additional stores being built or acquired. Due to production or servicing constraints, additional volume is often beyond the means of certain suppliers. For the sake of buying efficiency, chain buyers have sometimes changed suppliers to those willing to add production volumes. There have also been instances where a chain has changed the buyers or their responsibilities, forcing producers to again compete and establish relationships with the new buyers.

PAY CHANGES ON THE HORIZON — One phenomenon affecting growers is the relatively new auction buying by a number of chains, particularly supermarkets. Perhaps caused by consolidation and/or centralization of buying functions, a number of chains have asked growers to participate in on-line reverse auctions to bid for their business. In such instances, purchases are made from growers willing to supply to a set of predetermined and written specifications, which are published on-line. Thus, superior quality

is not encouraged nor rewarded, as the product is seldom seen by buyers. Instead, growers are forced to produce to the minimum standards to remain as competitive as possible.

Another decision being considered by several chains is whether or not to move to a pay-by-scan transaction basis. Today, most chains pay for the product delivered. But several chains are considering moving to paying only for the product scanned at checkout. This would force producers to absorb the entire shrinkage now assumed by retailers. It might also force growers to modify their product and/or service protocols to help assure getting paid for their efforts. More frequent deliveries of smaller quantities per delivery and the servicing of retail displays are two possible examples of changes growers will be forced to make. Cash flow considerations are another concern. This pay-by-scan change would benefit the retailer, who will be able to radically reduce inventory dollars from their books. Such a move would increase the retailer's return on assets, something of particular importance to Wall Street, as market opportunities become more limited due to store saturation.

STRUCTURAL IMPACTS ON THE INDUSTRY — The impacts of the mass marketers on the nursery and floricultural industry are tremendous. To their credit, many would argue that the chains have exposed many more consumers to nursery and floral products. There is no doubt that this is true, as the presence of mass marketers has opened not only the consumers' eyes to the industry's products but additional market opportunities for producers as well. Mass marketers have also facilitated the growth of the offshore cut flower producers to develop into the major suppliers that they are of cut flowers and greens. In recent years, offshore producers have also become providers of many cut flower bouquets now offered at retail, products formerly assembled not only in the U.S. but near the cities in which they were sold.

Domestically, the impact of the mass marketing of nursery and floricultural crops has led to the increased formation of larger and larger producer operations. The capital requirements needed to afford the infrastructure required to move mass quantities of product in a confined marketing window exceed those that this industry has historically managed. Most firms have been able to amass the capital on their own, but the industry also has seen examples of investment brokers entering the industry to help finance some of these production operations. The financial returns of many of these brokers' acquisitions have not met Wall Street expectations.

In many instances, chain buyers have limited the number of firms with whom they deal in any market area, as chains have come to realize certain efficiencies when it comes to merchandising products if fewer vendors are utilized. Chains have begun asking vendors to provide care for in-store displays, especially during the bedding/garden plant season, something that is easier to request if one firm handles all of the merchandise. Whether or not producers are rewarded for the additional expense of providing fully managed displays is debatable, but some growers report that the improved product care leads to additional turns, which provide the needed results.

There are also several instances of producers partnering with several smaller firms in order to handle the volumes required to supply burgeoning chains. In one instance, there may be as many as 40 growers involved in cross-docking activities to satisfy one chain's needs in one market area. Depending upon the arrangements, this helps to spread the risk among several producers. Still, there are numerous examples of producers who supply 50%, 75% or even 100% of their output to one chain; when asked about risk, these growers often respond with discussions about production efficiencies and questions about what they could do even if they wanted to change, noting that their competitors would love to steal the account.

In contrast, the focus on mass marketers by large growers has created opportunities for smaller growers to develop niches serving independent retailers or to go into retailing themselves, selling directly to the consumer. In a recent survey of growers, it was found that the majority of several thousand

producers surveyed did some retailing of their own, whether that was 1% or 100% of their production. Smaller growers appeared to sell higher percentages, on average, of their production at retail. Yet, some larger producers have also used their own retail as a tactic for diversification. In many instances, producers in the middle seemed to focus their production on selling to independent retailers, perhaps, including a retail operation of their own.

The other impact of mass marketers on the industry has been one of consolidation. In recent years, grower numbers have appeared to decline from year to year, or at best, remain stable. One could debate why the producer numbers are diminishing, but many would argue that the stresses of either supplying mass marketers or competing with them as an independent grower-retailer are taking their toll. The capitalization requirements, the reduced margins, the increased demands, the risk associated with fewer customer numbers and the resulting consequences should that risk come to be realized have all created market pressures for larger producers. The struggle to remain competitive in a viable niche for smaller producers can be equally trying in markets being inundated by competing chains. There are already certain markets where independents hardly can be found.

The long-term consequences are uncertain, but the need to recognize the consumer's role in supplying derived demand for the entire market channel must be recognized. If the consumer develops a negative impression of the industry's products or for how those products are presented by a particular retail giant, this could have dire consequences for industry growth. Keeping the consumer intrigued is important, and one could argue that mass marketers and/or those supplying their stores must collectively take some responsibility for assuring the industry's future in this regard.

Summary

The green industry has become a major sector within U.S. agriculture and is of major importance to farmers, rural communities, and consumers. The green industry is clearly still a bright sector of U.S. agriculture. But it is no longer in the heyday of the 1980's when producers could grow whatever they wanted and still earn above-average profits. The industry has shifted (as has the rest of the economy) to a consumer-driven, rather than producer-driven economy. The obvious prospect is for continued growth, albeit at slower rates, within the green industry. With increased growth projections, production and marketing of landscape crops provide an alternative for some farmers who have produced traditional agricultural crops, e.g., corn, soybeans, and vegetables. Tremendous opportunity for growth still exists in the green industry.

Producers of all sizes are focusing on marketing and carefully looking at innovative branding campaigns to boost their sales (e.g. Flower Fields, Novalis, Ball FloraPlant). Smaller growers are looking for niches and value added products. Many of them are retailing directly to consumers. If they have rainy spring weather, consumers are not buying many bedding plants. Producers respond by potting-up bedding plants that aren't selling into planter boxes and bowls. This gives consumers a ready-made garden and keeps some of the value added dollars for producers. All growers are concerned about costs of production and are looking for ways to reduce labor and other costs, as well as how to improve their own business management skills to control costs. Machinery once available only to large producers is now affordable for smaller growers. Small growers are adopting it and mechanizing. Some smaller producers are buying the "commodity-type" plants from larger producers rather than producing these low cost plants themselves. Instead, they are focusing on specialty items in their own production. The industry is still growing, but is feeling the multiple impacts of a weakened economy. In the past, producers focused their concerns almost exclusively on production issues. The reality today is that the industry is more market-based. Accordingly, producers must focus on marketing and business management as a means of developing sustainable competitive advantages.

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