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# Landscape Installation Firms: I. Business Characteristics and Trends Affecting Industry Performance<sup>1</sup>

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## Abstract

A survey of landscape installers in Georgia gathered information that would help segments of the green industry work together more effectively. We received 80 completed questionnaires for a 42.3% response rate. Approximately 76% of the firms surveyed were in the metro Atlanta area with 79% of all landscape projects located in Atlanta, Georgia. Georgia firms conducted approximately 98% of their business in Georgia. Three size classes of firms were established based on the 1993 wholesale value of plant material purchased, small (< \$50K), medium (\$50K–\$200K), and large (> \$200K). Approximately 20% of the firms accounted for 80% of the plants purchased. Large firms had a higher percentage of their projects designed by a landscape architect as compared to small or medium sized firms. Industry trends most frequently identified as having a potential positive impact on the industry over the next five years were: (1) an improving economy due to low interest rates (25.4%), (2) growing consumer interest in the quality of the environment (13.8%), (3) better consumer understanding of the value and benefits of landscaping (12.3%), (4) population growth in Atlanta area (12.3%), and (5) increased industry professionalism and establishment of minimum standards (9.4%). The five trends with the greatest potential for negative impact on the industry were identified as: (1) government mandated employee benefits (23.0%), (2) competitors that bid below the reasonable cost for a job (21.6%), (3) government regulations and taxes (15.8%), (4) increased interest rates (10.8%), and (5) more start-up companies and out-of-state competition (9.4%).

**Index words:** market research, landscape contractor, installation, environment, interest rates, regulations, industry trends, competition.

## Significance to the Nursery Industry

The survey results provide insight into the characteristics of the landscape installation industry and trends that could affect its future economic health. Nursery producers, landscape architects, and university personnel could use the information to better support and market goods and services to this group. The results demonstrate that landscape architects influence demand for a large portion of plant material used in the landscape trade and should be a target of grower marketing programs. Opportunities for industry trade associations to assist the landscape installation industry include monitoring state and national legislation and working to minimize regulatory and employee mandated costs.

## Introduction

The nursery/landscape industry is involved in substantial business-to-business marketing as well as consumer marketing (2). Effective marketing between segments of the nursery/landscape industry, such as growers and landscape installers, requires an understanding of the operating needs of each industry segment. Improved marketing practices may require focusing on groups that influence demand (3).

Recent market research (4, 5, 6) suggested that landscape architects influence demand for plant material and should be a target of nursery marketing programs. This market research led to the formation in Georgia of a New Alliance, an affiliation of the Green Industry and Landscape Architects (1). Earlier market research (4, 5) suggested that landscape

architects influenced the species purchased by landscape installers. However, the portion of plant material purchased by landscape installers that is specified by landscape architects has not been determined.

The landscape installation industry is a part of the rapidly growing green industry in the United States (10). Landscape installation firms depend on other firms for supply of plant material (3). This has contributed to growth of the nursery industry. A better understanding of factors that influence the landscape installers' buying decisions could help nurserymen develop marketing plans.

The objectives of this study were to (1) determine the value of plant material purchased by landscape installers, (2) identify trends that would have positive or negative impact on the landscape installation industry, and (3) quantify business characteristics that relate to marketing of plant material to the landscape installation industry. Size classes were established and results analyzed by size of landscape installation firm since market segmentation can help focus marketing plans. Earlier research demonstrated that different size landscape architectural firms in Georgia had different service requirements (5, 6, 7).

## Material and Methods

Survey questionnaires (Table 1) were mailed to 189 firms which were members of the landscape division of the Georgia Green Industry Association and members of the Metropolitan Atlanta Landscape and Turf Association. The initial mailing was sent in November 1993, with follow-up mailings to non-respondents in December 1993 and January 1994.

Responses were analyzed according to the size of the landscape installation firm, based on the 1993 wholesale value of plant material purchased: small (< \$50K), medium (\$50K–\$200K), and large (> \$200K). Data were tabulated and analysis of response conducted using PROC GLM and PROC FREQ of SAS (11). The open-end questions were coded, tabulated, and analyzed as previously described (5).

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**Table 1. Survey questions.**

1. Location	City _____	Zip Code _____
2. Are you the (check one):	Owner _____	Employee/Manager _____
3. Classify your business as (circle one):		
A. Institution/Government Agency	B. Private Business	
4. (A) What percentage of your projects are in-state and out-of-state?	In-state _____%	Out-of-state _____%
(B) Of the in-state projects, what percentage is in the metropolitan Atlanta area?	_____%	
5. What percentage of your installation projects are designed by a landscape architect?	_____%	
6. Wholesale value of plant material purchased in 1993? \$	_____	
7. What do you see as trends that could affect your business over the next five years?		
Positive Impact on Business:		
(1)	_____	
(2)	_____	
Negative Impact on Business:		
(1)	_____	
(2)	_____	

**Table 2. Response rate and location of firms surveyed.**

	Location	
	Georgia	Atlanta
Firms surveyed <sup>a</sup>	189	143
Firms responding	80	53
Percent <sup>b</sup>	42.3	37.0

<sup>a</sup>Firms surveyed were members of the Georgia Green Industry Association and the Metropolitan Atlanta Landscape and Turf Association.

<sup>b</sup>Firms responding as a percentage of total firms surveyed.

**Table 3. Value of plant material purchased by landscape installation firms.**

Size <sup>a</sup>	Landscape firms		\$ Value plant material purchased (thousands)			
	Number (N)	Total (%)	Firm average	Sum (all firms)	Total (%)	Range
Small	29	45	15.6a <sup>b</sup>	452.4	4.3	0.5–45
Medium	21	33	106.2a	2230.2	21.4	50.0–200
Large	14	22	553.6b	7750.4	74.3	223.0–2000
All firms	64	100	163.0	10433.0	100.0	0.5–2000

<sup>a</sup>Firm size based on 1993 wholesale value of plant material purchased: small (< \$50K), medium (\$50K–\$200K), large (> \$200K).

<sup>b</sup>Means within a column followed by different letters differ at the 1% probability level.

## Results and Discussion

Forty-two percent of the firms (80 respondents) completed the survey (Table 2). Seventy-six percent (143 respondents) response rate for Atlanta firms corresponded closely to their percentage of the total firms surveyed indicating that the respondents were representative of the sample population. Most of the responding firms (93%) were classified as private business. Seventy-one percent of the respondents were the owner of the firm surveyed and the remaining 29% were either the manager or employee. Thus, the results of this study reflect primarily the views of the decision makers in the private sector of the landscape installation industry.

The wholesale value of plant material purchased by respondent installation firms totaled \$10.4M (Table 3). The total value of plant material purchased by landscape installation firms in the two trade associations surveyed, extrapolated to about \$25M. The total value of plant material purchased by Georgia landscape installation firms could be two to three times this value (\$50M–75M) since an earlier study (9) estimated 400 landscape firms in Georgia in 1989. The purchases of landscape installers represent a substantial portion of the estimated \$152M farm gate value of nursery, greenhouse, and turf products produced in Georgia (8).

Twenty-two percent of the firms were classified as large with a wholesale value of plant material purchased greater than \$200K (Table 3). These firms accounted for approximately 74% of the plant material purchased by Georgia landscape installation firms. The value of plant material purchased by these large firms ranged from \$223K to \$2.0M. Medium-sized firms (\$50K–\$200K) accounted for 33% of the respondents and approximately 21% of the total dollar value of plant material purchased in 1993. Small firms (< \$50K) accounted for 45% of the respondents and only 4% of total dollar value of plants purchased (Table 3). There were approximately twice as many small firms in operation as were large firms but, the large firms spent 17 times more on plant material than the small firms (Table 3). The size and dollar value distribution of landscape installation firms was similar to that of landscape architectural firms (5) where relatively few firms accounted for a large percentage of plant material purchases.

Most (> 93%) of the projects for Georgia landscape installation firms were located in Georgia (Table 4). Small and medium firms conducted a higher percentage of their business in state (about 98–99%) as compared to large firms (93%). There were no differences between landscape firm sizes for the percent of jobs conducted in the metropolitan Atlanta area; landscape firms conducted about 79% of their business in the metro area. This and previously stated data (Table 2) suggests that the landscape installation industry

**Table 4. Percentage of landscape installation projects in Georgia.**

Firm size <sup>a</sup>	Percent projects <sup>b</sup>
Small	98.2a
Medium	98.7a
Large	93.1b

<sup>a</sup>Firm size based on 1993 wholesale value of plant material purchased: small (< \$50K), medium (\$50K–\$200K), large (> \$200K).

<sup>b</sup>Means within a column, bearing different letter, differ at the 1% probability level.

**Table 5. Identified trends with a positive impact on the landscape installation industry.**

Trend	Firm size <sup>a</sup>			
	Small	Medium	Large	All firms
	----- Percent response -----			
1996 Olympics	0.0	8.9	12.9	7.2
Increased industry professionalism, minimum standards for installers	11.8	4.4	6.5	9.4
Better educated consumer demanding more unusual plants	9.8	8.9	0.0	6.5
Improving economy, more building due to low interest rates	25.5	28.9	22.6	25.4
Increased consumer interest in improving the environment and quality of life	17.6	13.4	12.9	13.8
Increased understanding of the value and benefits of landscaping	15.6	8.9	16.0	12.3
Government regulations such as tree ordinances, highway landscaping	2.0	0.0	6.5	2.3
Greater diversity of available plants	5.9	4.4	0.0	4.3
More xeriscaping, less grass	5.9	8.9	0.0	6.5
Population growth in Atlanta area	5.9	13.3	22.6	12.3

<sup>a</sup>Firm size based on 1993 wholesale value of plant material purchased: small (<\$50K), medium (\$50K–\$200K), large (>\$200K).

in Georgia is located primarily in the metropolitan Atlanta area (Table 2) and conducts business primarily in the Atlanta area. The concentration of Georgia firms in the Atlanta area was in agreement with an earlier study (9).

To determine the influence of landscape architects on plant material purchases by landscape installers, respondents were asked to identify the percentage of their projects designed by landscape architects. Large installation firms had a higher percentage of their projects (84.3%) designed by landscape architects than did small (29.0%) or medium (40.2%) sized firms. Using the value of plant material purchased by each firm and the percentage of their projects designed by landscape architects, an estimated 76% of the plant material purchased by the Georgia landscape installers was specified by landscape architects. This demonstrates that landscape architects substantially influence the choice of plants purchased by landscape installers and in turn demand at the nursery level. If growers want to influence which plants will be in demand, an appropriate level of marketing resources should be directed to this important group of decision makers.

Landscape installers were asked to identify trends that could have a positive impact on their business over the next five years (Table 5). The improving economy, due to lower interest rates (25.4% of responses), growing consumer interest over the quality of their environment (13.8%), population growth in the Atlanta area (12.3%), as well as understanding the value of landscaping (12.3%) were the trends most often identified by all sized firms. Large firms (22.6%) felt stronger about the positive effect of population growth on business than did medium (13.3%) or small firms (5.9%). This could indicate that larger firms concentrate on new commercial and residential construction while smaller firms are more heavily involved in landscape renovation, a market segment less affected by population growth. Increased consumer interest in improving the environment (12.9–17.6%) and better understanding of the value and benefits of landscaping (8.9%–16.1%) were both identified by a large percentage of all three size firms (Table 5).

Other trends identified were increased industry professionalism (9.4%), 1996 Olympics scheduled to be held in Atlanta (7.2%), more xeriscaping (6.5%), demand for more unusual plants (6.5%), greater diversity of available plants (4.3%) and government regulations (2.2%). With the exception of government regulations, the last four trends were

identified only by small and medium-sized firms (Table 5). These trends provide insight on how related groups might assist landscape installers. For example, extension service publications on environmental landscaping (wildlife habitat, butterfly gardens, attracting hummingbirds, etc.) could educate the public on the value of landscaping and improve business opportunities, such as better pricing, for the landscape installation industry.

The most noted trend that was identified as having a negative impact on the landscape installation industry, by all firms, was government mandated employee benefit costs (23.0%) (Table 6). Another area of significant concern was the impact of competitors that bid below the reasonable cost of a job (21.6%). This area was of particular concern to the medium sized firms (27.5%) compared to small (16.3%) or large (13.8%) firms. Perhaps medium sized firms are at a disadvantage to deal with low bids since large firms can enjoy economies of scale and small firms generally do not have the overhead of medium sized firms. Government mandated costs in the form of new regulations or taxes (15.8%) was also a major concern and represent an opportunity for state and national associations to assist individual businesses. Increased interest rates (10.8%) was identified as a potential negative impact and was listed most often by small firms (14.3%) as compared to large firms (3.4%). The negative impact of more start-up companies and out-of-state competition (9.4%) was an often mentioned trend, but was of particular concern to the large firms (34.5%). Other trends with a potential negative impact were industry reliance on chemicals (5.8%), water rationing (4.3%), and availability of cheap plants (3.6%), all of which were listed by only the small or medium sized firms. Lack of quality labor (5.8%) was another identified trend with negative impact, that was listed by all size firms, but of particular concern to medium sized firms. Several respondents indicated that availability of low priced plants encourages homeowners to purchase and install their own plants. The comments regarding chemical use and effects of cheap plants were related primarily to homeowners and not commercial clients.

This study demonstrates that the landscape installation industry surveyed in Georgia is located primarily in metropolitan Atlanta and conducts business primarily in the Atlanta area. This agrees with earlier work (9) and suggests that landscape firms tend to locate in metropolitan areas and work close to their business residence. The marketing

**Table 6. Identified trends with a negative impact on the landscape installation industry.**

Trend	Firm size <sup>a</sup>			
	Small	Medium	Large	All firms
	-----Percent response-----			
Increased interest rates, slow down in economy	14.3	10.0	3.4	10.8
Water rationing	6.1	5.0	0.0	4.2
Costs of employee benefits (health care, workers compensation, liability insurance)	28.6	22.5	20.7	23.0
Lack of quality labor	4.1	12.5	3.4	5.8
Competitors that bid below the reasonable cost of a job	16.3	27.5	13.8	21.6
Discount nurseries/garden centers, availability of cheap plants	4.1	0.0	0.0	3.6
Industry reliance on chemicals (chemophobia of customers, lack of availability of chemicals)	10.2	5.0	0.0	5.8
More start up companies and out-of state competition	2.0	5.0	34.5	9.4
Government regulations and new taxes that increase business costs	14.3	12.5	24.2	15.8

<sup>a</sup>Firm size based on 1993 wholesale value of plant material purchased: Small (<\$50K), Medium (\$50K–\$200K), Large (>\$200K).

of plant material or hard goods to landscape installers should emphasize how to handle product in their specific location. There were substantial differences among firms in terms of quantity of plant material purchased and their needs. These differences among different size firms should be considered by suppliers to the landscape trade in the development of marketing plans.

The quantity of plant material purchased by landscape installers demonstrates that they are an important customer group for nurserymen. However, this is the first study to demonstrate that the decision on which plants to purchase is made primarily by landscape architects (76% of projects). Growers attempting to influence which plants are purchased by landscape installers should focus some of their marketing efforts on landscape architects. Information sources used by landscape architects to determine which plants to specify were identified in an earlier study (7).

Several important trends were identified that could have a positive or negative impact on the landscape installation industry. This information could be utilized by trade associations, university faculty and other segments of the Green Industry to provide better goods and services to the landscape installation industry. Increasing industry professionalism, articulating the value of landscaping and the environmental enhancement aspects of nursery crops to consumers, working with government regulators and legislators to control mandated costs, and helping landscape installers understand the cost of doing business are key items that could benefit the landscape installation industry.

## Literature Cited

1. Barnes, R. 1993. GGIA and ASLA Mix It Up At the Atlanta Botanical Garden. Georgia Green Industry Newsletter. 4(11):21.
2. Boone, L.E. and D. Krutz. 1986. Contemporary Marketing. Fifth Edition, The Dryden Press, Chicago, IL. pp.278–305.
3. Florkowski, W.J., E.E. Hubbard, and G.L. Wade. 1994. Factors influencing the supply of four landscape services. J. Environ. Hort. 12:39–42.
4. Garber, M.P. 1991. Have you hugged your landscape architect today? Georgia Green Industry Newsletter 2(1):13–18.
5. Garber, M.P. and K. Bondari. 1992a. Landscape architects as related to the landscape/nursery industry: I. Impact on demand for plant material. J. Environ. Hort. 10:69–72.
6. Garber, M.P. and K. Bondari. 1992b. Landscape architects as related to the landscape/nursery industry: II. Selection of the production nursery and plant availability. J. Environ. Hort. 10:73–77.
7. Garber, M.P. and K. Bondari. 1992c. Landscape Architects as related to the landscape/nursery industry: III. Sources of plant material information. J. Environ. Hort. 10:78–80.
8. Georgia Nursery, Greenhouse, and Turf Survey. 1994. Georgia Green Industry Association Journal 5(7): 25–31.
9. Hubbard, E.E., J.C. Purcell, and G.L. Wade. 1989. An economic profile of the commercial landscape industry in Georgia. Univ. Georgia, Agri. Expt. Sta., Res. Rep. 573, p.10.
10. Johnson, D.C. 1990. Floriculture and environmental horticulture products. USDA-ERS, Stat. Bull. No. 817, p.245.
11. SAS Institute, Inc. 1989. SAS/STAT User's Guide. Version 6 4th edition. Cary, NC.