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Landscape Maintenance Firms: III. Opportunities for Cooperation in the Landscape/Nursery Industry[1]

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Abstract

Landscape maintenance firms in Georgia identified opportunities for landscape architects, landscape installers, growers, and university personnel to better serve their industry. The primary opportunities for landscape architects were to consider plant maintenance in the design stage (32.9%) and to specify plants with proven performance (27.6%). Landscape installers were asked to improve planting techniques (39.2%) and perform their own installation activities to ensure quality (27.5%). The top 2 opportunities for growers were improved quality and size standards for plant material (22.4%) and to supply new and different plants (16.4%). University personnel were asked to provide training and certification courses (37.9%) and landscape maintenance publications with information on pest management (19.7%). Landscape maintenance firms also identified the most common complaints received from their customers and the sources of information that influenced which plants to purchase. This information provides valuable insight into the needs of landscape maintenance firms and establishes a basis for more effective cooperation and marketing in the nursery/landscape industry.

Index words: market research, maintenance, marketing, landscape maintenance, nursery crops, plant health care.

Significance to the Nursery Industry

The information generated from this survey can be used to develop marketing/service plans for the landscape maintenance industry including workshops and marketing literature. The most frequently identified opportunities for nurserymen to assist maintenance firms were to improve the size and quality standards, including more uniform plants that meet or exceed specifications. Landscape installation firms could emphasize proper planting techniques. If the needs of the landscape maintenance industry are satisfied, the landscape customer will be better served and may place a higher value on the goods and services provided by the nursery/landscape industry.

Introduction

Landscape maintenance firms are a part of the green industry which includes producers, distributors, designers, and installers (2, 3). A common goal of all segments of the green industry is the delivery of a quality landscape for the consumer to enjoy. Delivery of the quality landscape involves substantial business-to-business marketing (1) as the various industry segments exchange goods and services. A requirement for more efficient marketing between industry segments is a better understanding of the needs of the customer (9).

Previous studies identified opportunities for growers, landscape installers and universities to assist landscape architects (5) and for growers, universities and landscape architects to assist landscape installers (7). This study is the first to examine how these groups can assist the landscape maintenance industry.

The type of information gathered in this study is important to improve the quality of the landscape received by consumers since the performance of each segment of the green industry is affected by others. For instance, landscape architects in Georgia specify 76% of the plants installed by landscapers (6) and have a large influence on which plants are placed in the landscape. Plant selection and site selection can have a big influence on plant performance and maintenance requirements in the landscape. Therefore, it is important that each industry segment understand how they can assist landscape maintenance firms. A needs assessment is also a basic step to development of marketing plans for the target customer (9).

The objectives of this study were to: (1) identify opportunities for landscape architects, landscape installers, growers, and university personnel to better assist the landscape maintenance industry; (2) identify the most common complaints from consumers received by landscape maintenance firms; and (3) identify the sources of information that influence the type of plants selected by maintenance firms.

Materials and Methods

Survey questionnaires were mailed to 190 firms which were members of the landscape division of the Georgia Green Industry Association (GGIA), Metropolitan Atlanta Landscape and Turf Association (MALTA), and Georgia members of the Professional Grounds Management Society. Questionnaires were directed to the landscape maintenance personnel by way of a cover letter. The initial mailing was sent in November 1993, with follow-up mailings to non-respondents in December 1993 and January 1994.

Size classes were established for responding firms and results were analyzed by size of landscape maintenance firms since market segmentation can help focus marketing plans (11). Earlier market research demonstrated that different size landscape architectural and landscape installation firms in Georgia had different service requirements (3, 4, 6).

Responses were analyzed according to the size of the landscape maintenance firm, based on 1993 wholesale value of plant material purchased: small (<$25K), medium ($25K–$100K), and large (>$100K). Data were tabulated and analysis of response conducted using PROC GLM and PROC FREQ of SAS (10). The statistical model used to perform

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Table 1. Opportunities for landscape architects to better assist landscape maintenance firms.

Opportunities for landscape architects[y]	Firm size[z] Small	Medium	Large	All firms
	percent response			
Consider plant material maintenance in the design stage	39.3	36.0	31.2	32.9
Use a greater variety of plants and plants with proven performance for target market	28.6	24.0	18.8	27.6
Greater awareness of plant material availability	10.7	20.0	31.2	18.4
Administer contracts equitably, work closely with maintenance project managers and involve maintenance early	7.1	12.0	18.8	13.2
Maintenance internship for landscape architects	10.7	4.0	0.0	5.3
Increased knowledge of turfgrass varieties and better lawn design	3.6	4.0	0.0	2.6

[z]Firm size based on 1993 wholesale value of plant material purchased: small (<$25K), medium ($25K–$100K), and large (>$100K).

[y]Categories of response from the open-end request: Please list two ways that landscape architects could help you supply better goods and services.

the one-way analysis of variance included firm size as independent variable. The open-end questions were coded, tabulated and analyzed as previously described (3). Frequency distribution for categorical data was determined using PROC FREQ. Responses to the open-end questions were coded, tabulated and analyzed as previously described (8).

Results and Discussion

Approximately 38% of the firms (72 respondents) completed the survey (8). The characteristics of the firms and respondents suggest that the results of this study reflect primarily the views of the decision-makers in the private sector of the landscape maintenance industry.

The most frequently listed opportunities for landscape architects to better assist landscape maintenance firms (Table 1) were, consideration of the maintenance requirements of plant material during the design phase (32.9%), specify plants with proven performance for the target market (27.6%), and greater awareness of available plant material (18.4%). These 3 most frequently listed opportunities account for 79% of the responses for all size firms and all 3 opportunities are related to the selection of plant material. These opportunities were the 3 most frequently listed for small, medium and large firms indicating good agreement throughout the landscape maintenance industry (Table 1). The large firms placed greater emphasis on landscape architects' awareness of plant availability (31.2%) than did medium (20.0%) or small firms (10.7%). Apparently landscape maintenance firms feel that proper plant selection has an important impact on the landscape maintenance requirements.

Another opportunity identified for landscape architects included early involvement of maintenance project managers (13.2%). The larger the landscape maintenance firm, the greater importance placed on involvement of maintenance project managers (small, 7.1%; medium, 12.0%; large, 18.8%). Two additional opportunities identified for landscape architects were landscape architectural firms providing maintenance internships (5.3%) and increased knowledge of turfgrass varieties (2.6%). Both of these opportunities were identified by small and medium firms.

The 2 most frequently identified opportunities for landscape installers (Table 2) to assist landscape maintenance firms were, utilization of proper planting techniques (39.1%) and performing their own installation activities (27.5%). These 2 opportunities represented two-thirds of the responses and were also the top 2 opportunities identified by small, medium and large firms, indicating good industry agreement on their ranking of important opportunities. The suggestion that landscape installation firms perform their own installation was more important to the medium (35.7%) and large (38.4%) firms than to the small (16.7%) firms. This response suggests that landscape installation firms are subcontracting the installation activity, resulting in a negative impact on the maintenance firms. Landscape installation

Table 2. Opportunities for landscape installers to assist landscape maintenance firms.

Opportunities for landscape installers[y]	Firm size[z] Small	Medium	Large	All firms
	percent response			
Inform maintenance firms of problem soil areas, utilize proper planting techniques, score roots	44.4	42.9	30.8	39.1
Perform their own installation activities	16.7	35.7	38.4	27.5
Set standard for consistent price and quality	5.6	21.4	7.7	11.8
Increased plant selection, improved grading of plants	16.7	0.0	7.7	11.8
No buried debris on job-site, provide for drainage	5.6	0.0	7.7	3.9
Reduced turf area, use certified sod for weed control	11.1	0.0	0.0	3.9
Cut rope and strap on ball and burlap plants	0.0	0.0	7.7	2.0

[z]Firm size based on 1993 wholesale value of plant material purchased: small (<$25K), medium ($25K–$100K), and large (>$100K).

[y]Categories of response to the open-end request: Please list two ways that landscape installers could help you to supply better goods and services.

Table 3. Opportunities for plant producers to assist landscape maintenance firms.

Opportunities for plant producers[y]	Firm size[z] Small	Medium	Large	All firms
	percent response			
Improved size and quality standards, uniform plant size, exceed specifications	17.9	15.8	37.5	22.4
Develop marketing strategy for new and unusual plants, supply new varieties and different types of plants	28.6	10.5	0.0	16.3
More container trees, better handling to avoid root ball damage	7.1	10.5	18.8	10.3
Delivery of small and short-term orders, on-time delivery, pick-up orders filled in a timely manner	10.7	10.5	6.2	9.0
Communicate availability of plant material, computerize if possible	3.6	10.5	18.8	9.0
Better watering prior to shipment	10.7	5.3	6.2	9.0
More low-maintenance, native plants	10.7	10.5	0.0	7.5
Provide installation and maintenance requirements, label plants	3.6	15.8	0.0	7.5
Cooperate with landscape architects on new plant material and availability	0.0	5.3	12.5	4.5
Larger plants	7.1	5.3	0.0	4.5

[z]Firm size based on 1993 wholesale value of plant materials purchased: small (<$25K), medium ($25K–$100K), and large (>$100K).

[y]Categories of response to the open-end request: Please list two ways that plant producers could help you supply better goods and services.

firms may need to exercise greater quality control on subcontracted projects.

Two other less important opportunities identified for landscape installers (Table 2) were establishment of better standards for plant material (11.8%) and improved selection and grading of plant material installed (11.8%). Approximately 24% of the suggestions by landscape maintenance firms related to the establishment and enforcement of plant quality standards, suggesting that poor quality or inconsistent quality plant materials placed in the landscape are causing maintenance problems. Other opportunities of much less importance identified for landscape installers were removal of debris (3.9%), reduced turf areas and use of certified sod for weed control (3.9%), and removal of ropes and straps from ball and burlap plants (2.0%).

The 2 most frequently listed opportunities for plant producers to assist landscape maintenance firms (Table 3) were, improved size and quality standards for plant material (22.4%), and introduction of new plant varieties (16.3%). The large firms felt very strongly about the need for improved size and quality standards (37.5%), compared to small (17.9%) and medium (15.8%) firms. The availability of new varieties was particularly important to small firms (28.6%), of less importance to medium (10.5%) firms, and was not even mentioned by large firms.

In addition to improved size and quality standards, large firms were most interested in the availability of more container trees and better handling of ball and burlap trees (18.8%), rapid communication of plant availability lists (18.8%), and grower cooperation with landscape architects on plant availability (12.5%). These 3 opportunities accounted for 50% of the responses from large firms which was substantially greater than for small (10.7%) or medium (26.3%) firms. The percent response for medium firms (Table 3) did not exceed 15.8% for any of the opportunities rated. The frequency response of small firms was also fairly evenly distributed with the exception of the stronger emphasis on new plants (28.6%).

The 3 most frequently listed opportunities for university personnel to better assist landscape maintenance firms, ac-

Table 4. Opportunities for university personnel to assist landscape maintenance firms.

Opportunities for university personnel[y]	Firm size[z] Small	Medium	Large	All firms
	percent response			
Provide training/certification courses, computer workshops	40.7	33.4	43.8	37.9
Maintenance publications including information on insect and disease problems	25.9	6.7	6.2	19.7
Increased staff in order to make them more accessible, provide on-site training and diagnosis	22.3	13.3	6.2	15.2
Identify and communicate seasonal problems	3.7	6.7	12.5	7.6
Education maintenance customers on proper maintenance of plant materials, increase consumer education	3.7	13.3	12.5	7.6
Provide list of new laws and regulations and research information made available to the public	3.7	13.3	6.3	6.0
Improved cost and timeliness of soil-lab testing	0.0	13.3	12.5	6.0

[z]Firm size based on 1993 wholesale value of plant material purchased: small (<$25K), medium ($25K–$100K), and large (>$100K)

[y]Categories of response to the open-end request: Please list two ways that The University of Georgia research and extension personnel could help you supply better goods and services.

Table 5. Most common complaints received from customers regarding landscape maintenance projects.

Customer complaints[y]	Firm size[z]			
	Small	Medium	Large	All firms
	percent response			
Weed control in turf/lawn and beds	21.4	27.3	25.0	25.0
Poor scheduling of appointments, weather interruptions	3.7	18.3	25.0	12.5
Costs too high	14.4	13.6	12.5	12.5
Turf management (cut too low, poor color, disease)	10.7	13.6	12.5	12.5
Poor irrigation, improper irrigation scheduling and directions	10.7	9.1	6.3	9.7
Improper trash removal (leaves, litter)	10.7	9.1	0.0	8.3
Improper pruning techniques	7.1	0.0	12.5	6.9
Plants too large, excessive growth, plants too close together	7.1	4.5	6.2	5.6
Insect and disease problems	7.1	4.5	0.0	4.2
Poor soil preparation, improper drainage	7.1	0.0	0.0	2.8

[z]Firm size based on 1993 wholesale value of plant material purchased: small (<$25K), medium ($25K–$100K), and large (>$100K).

[y]Categories of response to the open-end question: What are the two most common complaints you experience regarding your maintenance projects?

counting for about 73% of the response for all firms (Table 4), were to provide training and certification courses (37.9%), provide landscape maintenance publications including information on pest management (19.7%), and increased accessibility of staff through on-site training (15.2%). All size firms placed the greatest emphasis on training and certification among all the opportunities rated. The small firms' need for maintenance publications (25.9%) and staff for on-site training (22.3%) were substantially greater than for medium (6.7% and 13.3%, respectively) and large (6.3%, both) firms. In fact, the top 3 opportunities accounted for about 89% of the responses for small firms (Table 4).

Other less important opportunities identified for university personnel (Table 4) were to communicate seasonal maintenance problems (7.6%), educate the consumer on plant maintenance (7.6%), provide a list of new laws and regulations (6.0%) and improved cost and timeliness of soil-lab testing (6.0%). The needs identified for university personnel suggest that a university support program for the landscape maintenance industry should include extensive on-site training and diagnostic assistance as well as regular communications with a check list of potential pest problems.

Additional insight into ways that industry and university groups can assist the landscape maintenance industry is contained in the list of complaints received from customers regarding landscape maintenance projects (Table 5). For all size landscape maintenance firms the most frequently received complaints were: weed control in lawns and beds (25.0%), interruptions in scheduling of appointments (12.5%), costs (12.5%), and turf maintenance (12.5%). Customer feed-back relating to weeds in the lawns and beds was the most common complaint for small (21.4%), medium (27.3%), and large (25.0%) firms. These results suggest that either maintenance firms are not focusing sufficiently on this issue or that they need additional assistance from chemical companies and university personnel. An additional possibility is that consumer expectations may exceed the ability to control weeds on a regular basis at a cost acceptable to the consumer. In any case, weed control is an area worthy of better understanding and more attention since it represents

Table 6. Sources of information that influenced the type of plants to be purchased by landscape maintenance firms.

Source	Firm size[z]			
	Small	Medium	Large	All firms
	percent response			
Consultation with local grower	53.3	68.4	86.7	68.6
Nursery catalogs	63.3	68.4	60.0	65.7
Extension service publications	55.1	45.0	40.0	50.0
Plant locators	17.2	35.0	40.0	27.2
Recommendation of landscape architects	21.0	40.0	33.4	32.4
Plants observed at public and botanical gardens	56.7	55.0	53.3	54.9
Trade journal articles	73.3	60.0	53.3	66.2
Producer trade shows	63.3	70.0	64.3	67.1
University sponsored seminars	80.0	70.0	60.0	74.7
Other landscape firms	56.6	40.0	40.0	49.3

[z]Firm size based on 1993 wholesale value of plant material purchased: small (<$25K), medium ($25K–$100K), and large (>$100K).

[y]Percent of respondents rating each source as important or very important

25% of consumer complaints. A high percentage of large (25.0%) and medium (18.3%) firms receive much more consumer feedback regarding interrupted schedules than do small (3.7%) firms. Complaints regarding high costs of maintenance and turf management were about equal across small, medium and large firms (Table 5). The complaints related to turf management and weed control suggest that these areas should be a significant part of a support program for the landscape maintenance industry.

Other complaints, for all size firms, received from customers regarding landscape maintenance projects include dissatisfaction with the irrigation system (9.7%), inadequate removal of trash (8.3%), improper pruning techniques (6.9%), crowded plants (5.6%), insect and disease problems (4.2%), and poor drainage (2.8%). The concern of consumers regarding crowded or excessive size plants could be addressed by the landscape architect or landscape contractor through proper plant selection and spacing.

An understanding of the sources of information that influence the type of plants being purchased by landscape maintenance firms could help growers and other groups that supply information to the landscape maintenance trade. The top 5 sources of information and their frequency of rating as 'important' or 'very important' (Table 6) in descending order for all size firms, were: university sponsored seminars (74.7%), consultation with local grower (68.6%), producer trade shows (67.1%), trade journal articles (66.2%), and nursery catalogs (65.7%). These results suggest that landscape maintenance firms rely heavily on nurserymen and university personnel, and the information they disseminate, to make decisions on which plants to purchase. The reliance on university sponsored seminars and trade journal articles decreased with increased size of the firm while the consultation with growers increased with increased firm size (Table 6). Other sources of information used by landscape maintenance firms (Table 6) included botanical and public gardens (54.9%), extension service publications (50.0%), other landscape firms (49.3%), recommendations of landscape architects (32.4%), and plant locators (27.2%). The use of plant locators increased with increased firm size.

The landscape maintenance industry values the plant material information provided by nurserymen and university personnel. These groups could better serve the landscape maintenance industry by directing more of their plant material information to landscape architects. Added emphasis should be placed on plant maintenance requirements including insect and disease resistance. This information could help landscape architects select low maintenance plants thereby reducing the need for pesticides in the landscape. Based on consumer complaints received by landscape maintenance firms, it is important that landscape architectural and landscape maintenance firms receive information on recommended turf varieties for specific sites and proper weed control measures. The opportunities identified in this study should help the industry to reduce the cost of landscape maintenance and to improve the quality of the landscape.

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