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Consumer Purchasing Habits of Florida Environmental Horticulture Products[1]

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Abstract

A garden center exit survey examining consumers' purchasing habits of environmental horticulture products was conducted in Florida in 2002. Nine hundred and ten surveys were completed with required information on why a particular store was chosen for shopping, availability of planned purchase items, and whether or not the final purchase matched the intentions of the buyer. The category of convenience/location was the major reason for shopping at a particular store. Other categories included price, quality, service, information, and other. Most respondents were shopping for non-plant (hardgood) items, but when shopping for plants, flowering plants for the outdoors ranked first. Seasonal shopping habits were identified, with nearly every respondent shopping at least once during the spring and fewer respondents shopping at least once during each of the other seasons. Five hundred and seventy-nine surveys identified 23 locations in the state, with the majority (62%) of them in the Orlando area. Other optional information included gender, age, education level, annual income, and type of store (chain or independent). Information is presented on responses to both required and optional items of the questionnaire.

Keywords: frequency of garden shopping, garden centers, nursery plants, shopping preferences

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Introduction

Floriculture/environmental horticulture has been one of the fastest growing segments of U.S. agriculture. This sector had an average annual growth rate of five percent from 1993 to 2003. However, for the first time in two decades, grower sales remained flat from 2001 to 2002 (USDA, 2003). Healthy gains in the late 1990s and 2000 slowed in 2001 as the current U.S. recession took effect. Nationwide, grower sales of nursery crops declined as sales of floriculture increased, even though U.S. consumption of nursery crops was greater than that of floriculture

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crops. The increase in floriculture sales helped maintain the status quo of grower cash receipts for 2001.

Grower cash receipts in four states (California, Florida, Texas, and North Carolina) equaled half the total value of U.S. floriculture and nursery crop sales. Florida environmental horticulture output impact in 2000 was $7 billion (Hodges and Haydu, 2002). There was also a value added impact of $6.4 billion, including labor income of $4.1 billion and indirect business taxes of $0.5 billion. Most likely, Florida maintains its market share of environmental horticulture crops because it is the fourth most populous state (15.8 million people in 2000) and has a growth rate of 2.3 percent annually (Bureau of Economic and Business Research, 2000). Add to this the fact that Florida's home construction industry remained high during 2000, which helped the demand for landscape plants.

The purpose of this study was to ascertain the purchasing habits of consumers in Florida regarding environmental horticulture products. To obtain the needed information, a garden center exit survey was conducted in 2002 under the auspices of the Florida Nurserymen and Growers Association. Enumerators attempted to gather information regarding the types of stores consumers were using, why consumers visited particular stores, and whether they had planned to make purchases at the garden center.

Methods

Consumers were individually interviewed at selected retail locations of either local garden centers or big-box retailers (chain stores) where environmental horticulture goods were sold. Respondents were approached and asked if they would answer questions regarding their visits as they were leaving the store. Four major questions were asked of respondents:

1. Why did you choose to visit this location?
2. What did you anticipate obtaining?
3. Are you leaving with what you planned, less than you planned, or more than you planned?
4. How frequently do you shop for garden products in each of the four seasons?

A total of 910 questionnaires were completed statewide. All major questions were answered by nearly 100 percent of those exiting; optional information was filled out to a much lesser extent. Twenty-three locations (optional information) were identified by 579 of the surveys. Nearly two-thirds (62%) of the surveys with identified locations were conducted in and around Orlando (Figure 1). Other surveys were conducted in and around Jacksonville (18%), Miami (9%), Tampa (7%), and Southwest Florida (3%).

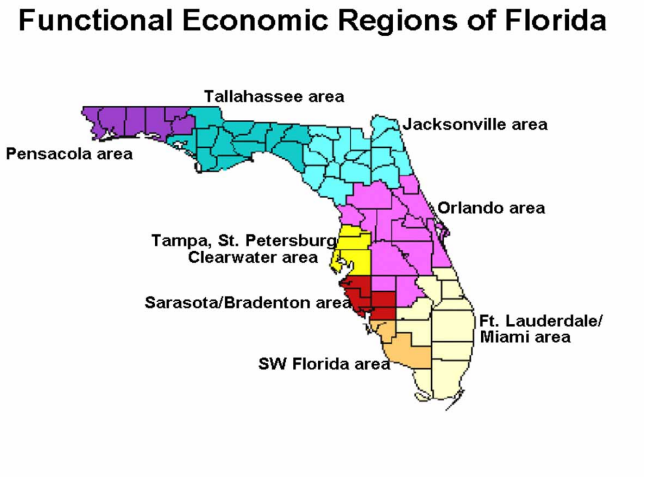

Figure 1. Eight economic regions in Florida as defined by the Bureau of Economic Analysis, U.S. Department of Commerce (Johnson, 1995).

Since multiple responses were possible for questions in which respondents were asked to rank several items, a weighted system of measure was used. Under the weighted system, the total number of #1 rankings out of all responses was counted for each criterion, followed by the number of responses ranked as #2, #3, etc. The total number of responses ranking a criterion as #1 was multiplied by five points, #2 responses were multiplied by four points, etc. The results of the five multiplications for each criterion were then summed to obtain the weighted ranking of each criterion. The results from the major questions were summarized first, followed by summaries from the optional information.

Results

Convenience/location was the major reason customers chose to shop at a particular store/center (Figure 2). Less important reasons included price, quality, service, information, and other. Given the importance consumers place on convenience/location, businesses should consider strategic location as a key competitive advantage from a marketing standpoint.

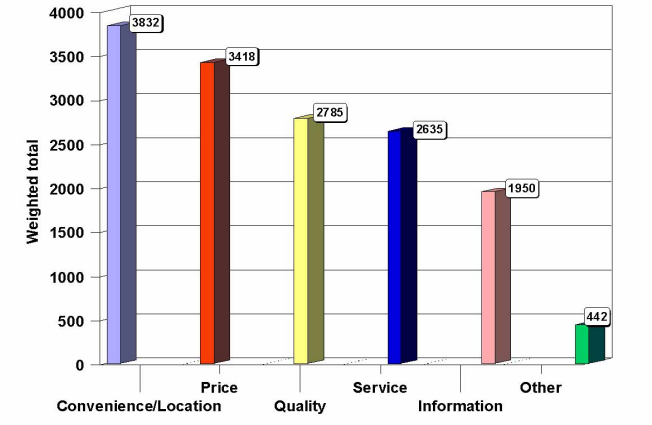

Figure 2. Ranking of criterion for choosing to shop at a particular retail outlet (910 respondents).

Figure 3 depicts the number of respondents who ranked each consideration as #1, #2, etc. Five hundred and sixty respondents ranked convenience/location as their #1 reason for selecting a particular store, followed by 199 respondents ranking it #2, 52 ranking it #3 reason, 24 ranking it #4, and 32 respondents ranking it #5. Table 1 illustrates how the weighted rankings were calculated for convenience/location. Also, the weighted rankings for each criterion are shown in Figure 2 and at the bottom of each bar in Figure 3.

Survey respondents were asked to indicate their shopping choices as they left the garden center. Choices were categorized as plants, non-plants (e.g., hardgoods), or information. Fifty-five percent of the respondents indicated they were looking for non-plant items (Figure 4).

In addition, each choice had additional subcategories. Figure 5 lists the non-plant items, which includes mulch (30%), fertilizer (16%), and pesticides (14%). Forty percent of the survey participants said they were looking for plants, with the majority of these respondents (53%) looking for

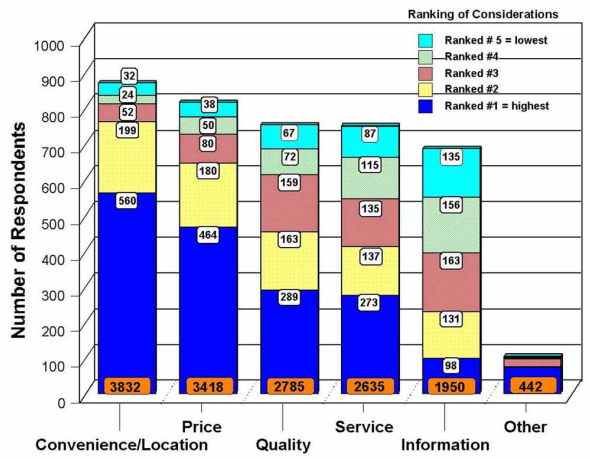

Figure 3. Weighted rankings of customer considerations when shopping for environmental horticultural products.

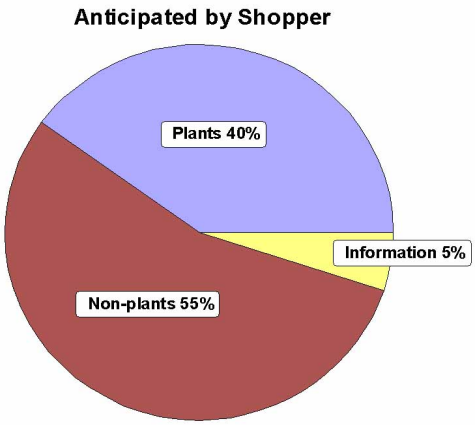

Figure 4. Reasons given for visiting garden center retail outlets (910 respondents).

flowering plants for outdoor use. Approximately one-fifth (21%) of those surveyed were purchasing either shrubs (21%) or trees (12%) for the outdoors, and eight percent were buying indoor houseplants. Only five percent of the participants indicated they were looking for information.

In response to the question, “Are you leaving with only what you planned to purchase, more than you planned, or less than you planned?”, 60 percent of the respondents indicated that they left with more than they had anticipated buying (Figure 6). From a retail standpoint, this suggests the importance of impulse buying. Therefore, having a full complement of goods and services can significantly impact gross sales and profitability. Having adequate variety and

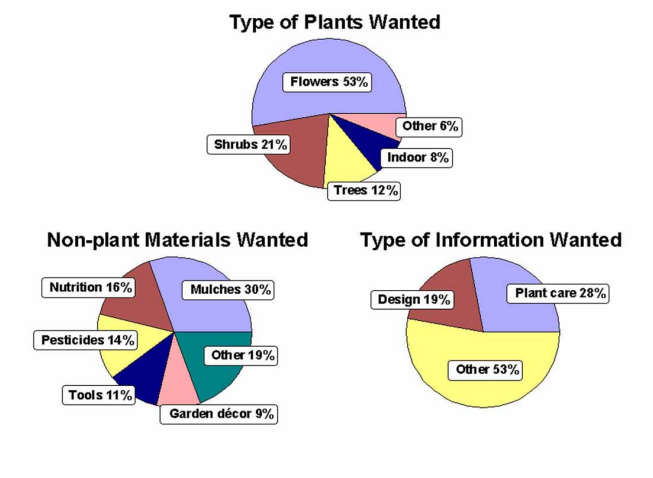

Figure 5. Types of items desired at garden center retail outlets (910 respondents).

availability of these products is especially important during high activity seasons like spring and fall.

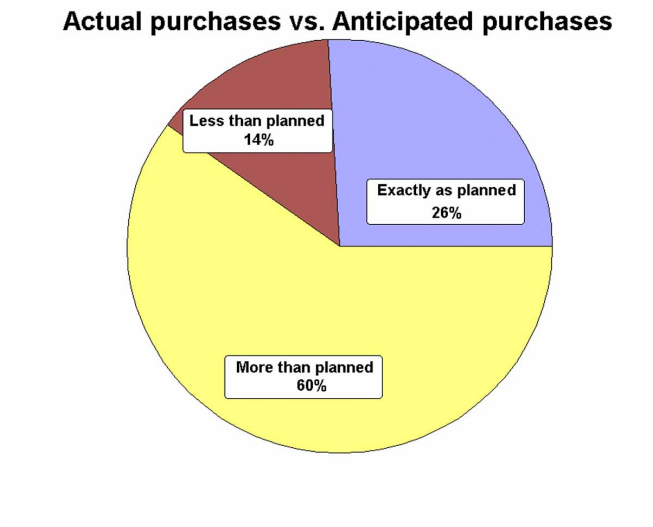

Figure 6. Actual purchases versus anticipated purchases (910 respondents).

As a final question, consumers were asked about their seasonal purchasing habits regarding environmental horticulture products. Results indicate that despite mild fluctuations in purchasing activity across seasons, consumers shop for these products aggressively year-round. Nearly all participants (98%) shop for these types of items in the spring, and somewhat fewer participants (89%) shop for these items in the fall (Figure 7). Summer (82%) and winter (78%) represent the least active seasonal periods.

Figure 7. Seasonal shopping patterns (910 respondents).

A further breakdown of shopping patterns showed that nearly 40 percent of those who shop in the spring do so on a weekly basis (Figure 8). This is the only time of the year with a high weekly shopping percentage. Approximately one-third (31%) of the spring shoppers do so at least monthly, while another 31 percent are equally split between shopping once a season or twice a year. Only 13 percent of the summer horticultural shoppers do so on a weekly basis, while nearly half (44%) shop monthly during the spring season. Twenty-five percent shop only once during the summer season. The majority (53%) of fall garden center shoppers do so monthly. The remaining fall shoppers are split nearly equally as weekly, bi-annual, or once-a-season shoppers. Winter shoppers are split into basically three equal groups: once-a-season shoppers (33%), monthly shoppers (30%), and bi-annual shoppers (28%). Only eight percent of the shoppers do so weekly during the winter, which, with the exception of the spring buyers, is the least favored frequency of shopping by the respondents.

Demographic Information

Demographic information was collected, but not all respondents provided information in each category. Some of this information may be of interest even though there was not full participation. Only about half of the respondents provided gender information (199 males, 236 females). Slightly fewer participants (415) provided an age category (Figure 9). Only 15 percent (132) furnished education information (Figure 10). Household-income information was supplied by 28 percent (248) of the

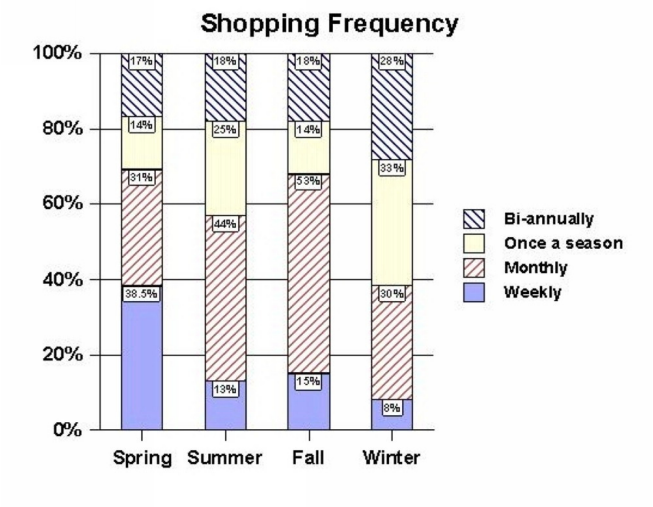

Figure 8. Spring shopping patterns (910 respondents).

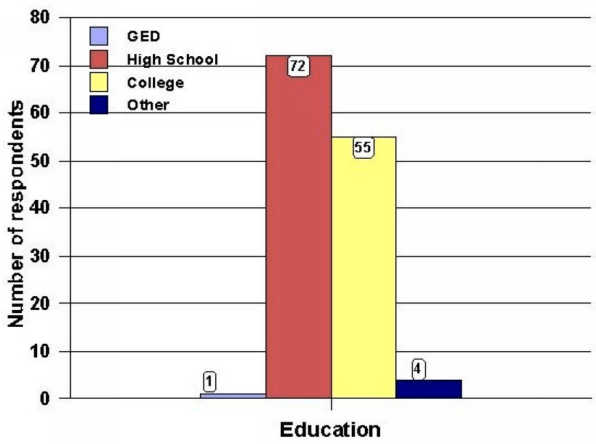

Figure 10. Educational distribution of exit respondents providing information.

respondents and was split almost equally between income categories of less than $50 thousand (129) and more than $50 thousand (119). Additional information was collected on store location, and it was noted whether the retailer was an independent or a chain store. Over half of the surveys (504) included the type of retail store, with 87 percent of those surveys (439) conducted at retail chain stores. Twenty-three different locations were identified in the optional demographic area of the exit surveys conducted, and eight locations only had from one to ten surveys conducted. The number of surveys at other locations ranged from 11 to 20 (five locations); 21 to 30 (six locations); and 31 to 40, 41 to 50, and 61 to 70 surveys were conducted at only one location, respectively. One location had 157 surveys conducted.

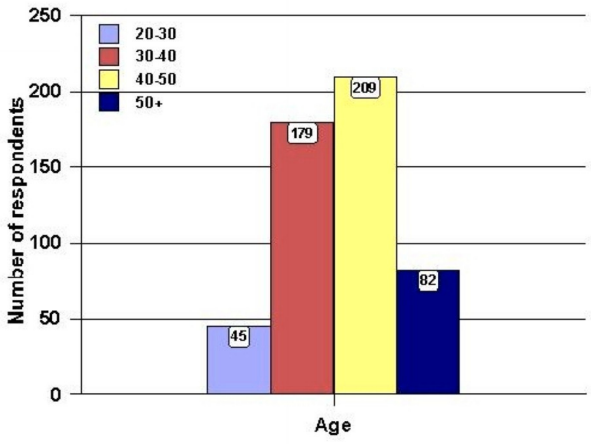

Figure 9. Age distribution of exit respondents providing information.

When choosing a location to shop, nearly all subcategories of shoppers followed the same pattern as shown in Figure 2. The exceptions were those who indicated a college education or other education, those with annual household income greater than $50 thousand, and those shopping at an independent retailer. All of these categories, with variations from the norm, still considered convenience/location as the number one reason to shop at a particular store. However, except for those shopping at independent retail businesses, quality ranked second and price ranked third, leaving service, information, and other in the last three place rankings (Figures 11 and 12). Those shopping at independent retailers also chose convenience/location as the top reason for shopping at a particular store, but service ranked second as the reason for choosing a place to shop for horticultural materials (Figure 13). Like others in this group whose preferences varied from the majority of the respondents, quality continued to rank above price as a reason for shopping at a given location, with information and other ranked as less important.

Information on reasons why consumers chose to shop at a particular establishment is included in Table 2. Table 3 is a summary of the shopping preferences of the respondents by location. Table 4 is a summary of the shopping frequency of respondents by location. Table 5 provides information for the optional categories based on shopping preferences. Table 6 provides information for the optional categories based on shopping frequency.

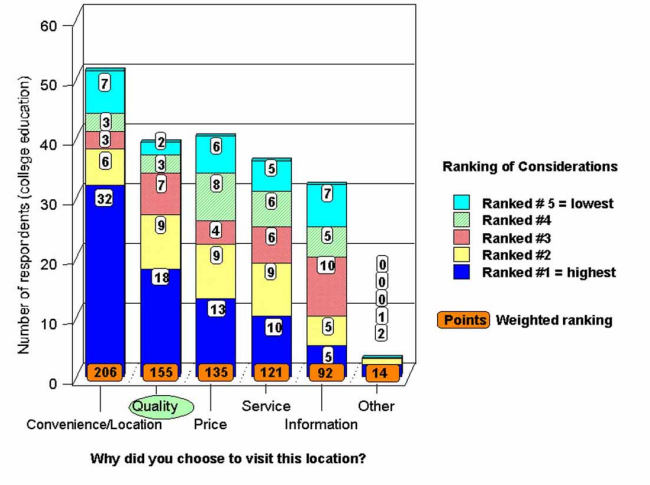

Figure 11. Quality more important than price in choosing a particular location by respondents with college education.

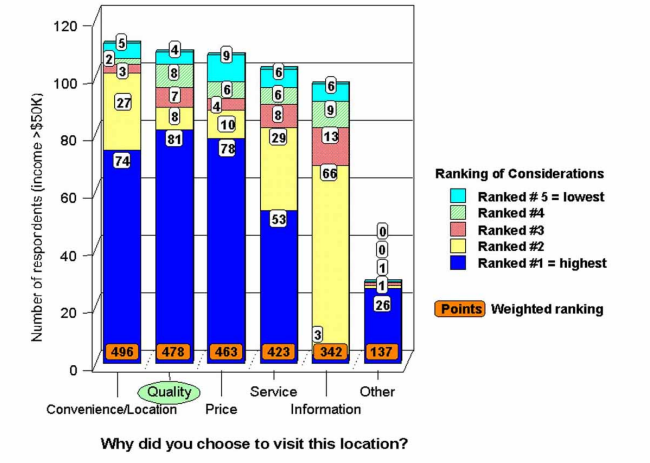

Figure 12. Quality more important than price in choosing a particular location by respondents with annual incomes greater than $50,000.

Conclusions

Convenience/location was the most important reason why consumers selected a particular garden center store. Those who frequent chain-store garden centers are looking for the best price, with less emphasis on quality or service. Those who frequent independent garden centers place more emphasis on service and quality, rather than price. If the garden center is located in an area where many of the shoppers may have a college education or where income is greater than $50 thousand annually, quality merchandise should be the goal of the retailer. While the most frequently purchased items include mulches and flowering plants for the outdoors, the majority of

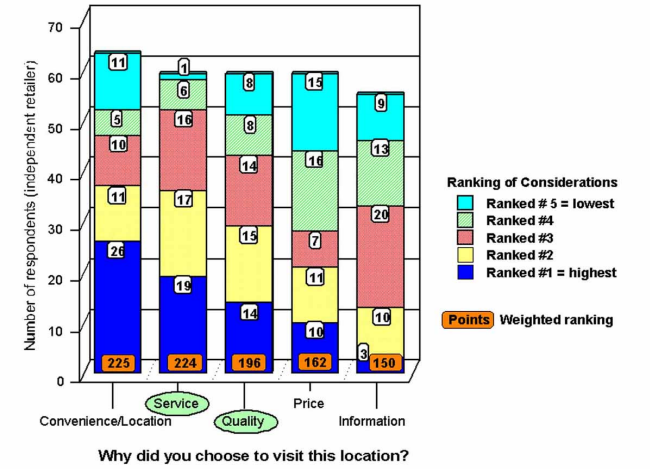

Figure 13. Service more important than quality in choosing a particular location by respondents shopping at independent retail centers.

shoppers will purchase more than initially planned. This suggests that retailers and hardgood suppliers have opportunities to increase sales if the right incentives are provided to shoppers.

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Table 1. *Convenience/location* weighted ranking calculation.

Total Responses x Points	Point Calculation		Total Points
560 x 5	5 points (highest ranking)	=	2800
199 x 4	4 points (4 points out of 5)	=	796
52 x 3	3 points (3 points out of 5)	=	156
24 x 2	2 points (2 points of 5)	=	48
32 x 1	1 point (lowest ranking)	=	32
	Total Points	=	3832

Table 2. Survey locations and rankings (a blank space indicates no difference from entire survey).

Location	Number of Surveys Conducted	Rank Order of Choices[1]					
		#1	#2	#3	#4	#5	#6
Boca Raton	10	P	C/L	Q	S	I	
Casselberry	70	C/L	P	O	S	Q	I
Daytona Beach	23	C/L	P	S	Q	I	
Delray Beach	15	C/L	P	Q	S	I	
Gainesville	29	C/L	S	P & Q (tie)		I	
H.D. Waterford	1	C/L	P & Q (tie)		S	I	O
Jacksonville	40	C/L	S	Q	P	I	
Jupiter	7	P	C/L	Q	S	I	
Lake Worth	10	C/L	P & S (tie)		Q	I	
Lantana	3	Q	I	S	P	C/L	
Leesburg	27	C/L	P	Q	I	S	
Melbourne	23	C/L	P	Q	I	S	
Naples	20	C/L	P	Q	I	S	
Ocala	9	C/L & P (tie)		Q	I	S	
Orlando	43	C/L	P	Q	S	I	
Oviedo	157	C/L	P	S	Q	I	O
Rockledge	4	Q	I	S	C/L & P & O (tie)		
St. Augustine	24	P	C/L	Q	S	I	
St. Petersburg	14	P	C/L	S	I	Q	
Tampa	29	C/L	P	Q	S	I	
Waterford Lakes	1	C/L	P	S & Q (tie)			
West Palm Beach	19	C/L	P	Q	S & I (tie)		
Winter Haven	11	P	C/L	Q	I	S	
Total	589						

1 C/L = Convenience/Location P = Price S = Service I = Information Q = Quality O = Other

Table 3. Shopping preferences, by location (a blank space indicates no difference from entire survey).

Location	Number of Surveys Conducted	Shopping Preference			Purchases per List
		Plants	Non-Plants	Information	
		Flowers Shrubs Trees Other	Tools Nutrition Mulches Garden Decor Pesticides Other	Plant Care Design Other	Exactly Less Than Planned More Than Planned
Boca Raton	10			Design Other	Exactly
Casselberry	70				
Daytona Beach	23		Other		
Delray Beach	15		Nutrition Mulches Garden Decor	Plant Care	
Gainesville	29		Other		
H.D. Waterford	1		Other		
Jacksonville	40		Other	Plant Care	
Jupiter	7	Shrubs Other	Nutrition	Design Other	Exactly
Lake Worth	10		Pesticides		Exactly
Lantana	3	Shrubs	Garden Decor	Plant Care Other	Exactly
Leesburg	27			Plant Care Other	
Melbourne	23				
Naples	20		Mulches Other		Exactly
Ocala	9		Other		Exactly
Orlando	43			Plant Care Design Other	
Oviedo	157		Mulches Pesticides	Plant Care	
Rockledge	4		Nutrition Mulches	Plant Care Design	Exactly More than Planned
St. Augustine	24				Exactly
St. Petersburg	14		Mulches Other		
Tampa	29		Other	Plant Care Other	
Waterford Lakes	1		Mulches Other		
West Palm Beach	19			Plant Care	Exactly

Table 4. Shopping frequencies, by season (a blank space indicates no difference from entire survey).

Location	Number of Surveys Conducted	Shopping Frequency			
		Spring	Summer	Fall	Winter
		Weekly Monthly Twice/Year Once/Season	Weekly Monthly Twice/Year Once/Season	Weekly Monthly Twice/Year Once/Season	Weekly Monthly Twice/Year Once/Season
Boca Raton	10	Twice	Twice	Twice	Twice
Casselberry	70		Weekly	Weekly Monthly	Monthly
Daytona Beach	23	Monthly	Once		Monthly
Delray Beach	15	Monthly	Twice	Twice	Twice
Gainesville	29	Once	Once	Once	
H.D. Waterford	1		Weekly		Monthly
Jacksonville	40	Once	Once	Monthly Once	
Jupiter	7	Monthly	Twice		Monthly
Lake Worth	10	Monthly	Twice	Monthly Twice	Twice
Lantana	3	Monthly	Twice		Monthly
Leesburg	27	Monthly	Once	Monthly Twice	Monthly
Melbourne	23	Monthly			Monthly
Naples	20	Monthly			Monthly
Ocala	9		Once	Weekly	Monthly
Orlando	43	Monthly	Once		Monthly
Oviedo	157				Monthly
Rockledge	4		Weekly	Weekly	Monthly Twice
St. Augustine	24	Monthly	Once		
St. Petersburg	14	Monthly Once	Once		Weekly
Tampa	29	Once	Once		Monthly
Waterford Lakes	1				
West Palm Beach	19	Twice	Twice Once	Twice	Twice
Winter Haven	11	Monthly	Once	Weekly Monthly	Monthly

Table 5. Shopping preferences, by optional category sectors (a blank space indicates no difference from entire survey).

		Shopping Preference			
		Plants	**Non-Plants**	**Information**	**Purchases per List**
Optional Category	**Number of Surveys Conducted**	Flowers Shrubs Trees Other	Tools Nutrition Mulches Garden Decor Pesticides Other	Plant Care Design Other	Exactly Less Than Planned More Than Planned
Male	109				
Female	236				
Age 20-30	34		Mulches Other		Exactly
Age 30-40	179				
Age 40-50	209				
Age 50+	82				
Education: GED	1	Flowers Shrubs	Tools Nutrition Pesticides		
Education: HS	72		Other		Exactly
Education: College	55		Plant Care		
Education: Other	4		Nutrition		
Income <$50K	129		Plant Care Other		
Income >$50K	119				
Independent Retailer	65		Plant Care		Exactly More Than Planned
Big-Box Retailer	439				

Table 6. Shopping frequencies, by optional category sectors (a blank space indicates no difference from entire survey).

Optional Category	Number of Surveys Conducted	Shopping Frequency			
		Spring	**Summer**	**Fall**	**Winter**
		Weekly Monthly Twice/Year Once/Season	Weekly Monthly Twice/Year Once/Season	Weekly Monthly Twice/Year Once/Season	Weekly Monthly Twice/Year Once/Season
Male	109				
Female	236				
Age 20-30	34		Monthly	Monthly	Monthly
Age 30-40	179				
Age 40-50	209				Twice
Age 50+	82				
Education: GED	1	Twice	Once	Twice	
Education: HS	72	Monthly			Monthly
Education: College	55				Twice
Education: Other	4		Weekly	Weekly Monthly Twice	Weekly Monthly Twice
Income <$50K	129				
Income >$50K	119				
Independent Retailer	65	Monthly	Once		Monthly Twice
Big-Box Retailer	439				