

GARDEN CENTERS: A SURVEY OF
CLIENTELE PREFERENCES

By

Phyllis Ann Roggow

Bachelor of Science

Oklahoma State University

Stillwater, Oklahoma

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Thesis Approved:

J. Steve Aubrey

Thesis Adviser

Earl E. Whitcomb

Stephen J. Miller

Norman D. Durham

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

It has been frequently stated in recent years that because of the energy crisis people are spending more time at home and more of this time at home is being devoted to yard maintenance, landscaping, vegetable gardening, etc. (1)

Along with the energy crisis has come an increased interest in ecology and the individual's relationship with the world around him. The public is becoming more and more aware of the relationship between plants and the ecology of the earth.

Two nationwide trends have directly added impetus to consumer interest in plants and plant products. The first is the home vegetable garden. The upsurge of interest in gardens includes an increase in the grocery bill, exercise for physical fitness, concern about quality and purity of commercial products, and the satisfaction of having provided one's own food. (2) Whatever their reason people seem to be gardening in ever increasing numbers. A study published by National Wildlife magazine asked participants to list the activities in which they and their families were most actively involved. Heading the list was gardening with 84% of those polled listing it as their major activity. (3) A study in Minnesota showed that seven out of ten people had a vegetable garden. (2)

The second trend is the interest in indoor plants. Nearly everyone

has green growing plants in their house or apartment. Evidence of consumer interest can be seen in the large number of small shops that have gone into business selling plants for the interior. This market is still growing.

There are three major interest groups involved in plants and plant products. They include producers, retailers, and buyers or consumers. The latter two, the retailers and consumers, to a certain extent dictate to the producer and it is the latter two on which this study is focused.

Many people doing the selling seem to be small businesses desiring to "jump on the bandwagon" with little knowledge of their consumer market or consumer needs.

Little research of the consumer market has been done since this expanded interest in plants has occurred. Very little is known about consumer needs or wants when he buys seeds, plants, or other garden center services.

Thus the question, are garden centers and other plant retailers fulfilling the needs of this large and varied number of consumers? Consumers can be categorized into regional, segmented, diverse, and specialized groups. These groups have been defined and their buying patterns and behaviors identified. (4) The object of this survey was to define these various groups by age of respondent, age of home, income, etcetera. This would make it possible to establish their buying patterns and behaviors in the area covered by the lawn and garden industry.

This study, then, is an attempt to delineate consumer needs and desires, thereby providing new and ongoing businesses with information

that would allow them to best serve their customers. Hopefully, this will better enable the business to succeed financially; and, on a broader base, help the consumer to have a more satisfying relationship with the "green industry."

CHAPTER II

MATERIALS AND METHODS

Data Collection

On October 1, 1976 a two page questionnaire with cover letter (see Appendix pages 34, 35, 36, and 37) was mailed to a random sampling of 190 Stillwater residents. The random selection was done through the division of the city into ten sections excluding such areas as were felt to be primarily composed of apartment complexes and high University student population as these areas were considered irrelevant to the study. The city cross reference directory was used to establish a mailing list based on street address. A self-addressed stamped envelope was included with the surveys to expedite their return.

The city was sectioned to derive the best cross section possible based on age and income of respondents and age of housing. All of these were felt to be important factors as to buying habits and product preferences.

The first six questions were used to establish present purchasing habits. The next four questions gave the respondent an opportunity to express preferences and indicate things which they felt were important in a garden center. The last nine questions were used to correlate buying habits and preferences based on age, income, sex, etcetera.

In the questionnaire the term lawn and garden center was used in-

stead of garden center to prevent the possible misconception in terminology which would limit the respondents to vegetable gardens even though the cover letter explained the scope of the term garden center.

A second letter (see Appendix page 38) was mailed to addresses on the mailing list on October 18 asking that the questionnaires please be filled out and returned. Statistically a much truer picture of the consumer population's practices and preferences is derived from the inclusion of the data received following this appeal. (5) Normally, those people most enthusiastic and interested in the subject being polled will respond immediately. It is those people who either have only moderate or little interest who are more apt to respond to the second letter and thus bring the data into reasonable alignment for application to the population as a whole.

Only the 140 questionnaires received by October 25 were used in the study. One hundred twenty had been filled out and returned by consumers and this accounted for 74% of the questionnaires with 63% of the total number completed. Twenty had been returned by the post office primarily marked unforwardable.

Data Interpretation

The 120 questionnaires which had been completed were computer coded on Fortran system cards. Analysis was by the statistical analysis system programs for Procedure Correlation (correlation of responses) Procedure Frequency (frequency of responses) and Procedure Means (the average response for each question). Additional data was obtained on specific questions through the use of Chi Square comparisons. Figures posted in the tables have been rounded to the nearest hundredth for

convenience. The Chi Square tables allowed comparison between questions to determine relationships. The other tabulations give responses to a single question and although no test can be performed some insight to customer preferences can be obtained.

CHAPTER III

FINDINGS

The first section of this chapter deals with the general background of respondents as revealed by the survey.

TABLE I

(Question #10)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY AGE

Age	Frequency	Percent
Under 25	4	3.33
25-34	22	18.33
35-44	19	15.83
45-54	31	25.83
55-64	21	17.50
<u>65 and over</u>	<u>23</u>	<u>19.17</u>
TOTALS	120	100.00

Respondents were requested to indicate the age range in which they belonged. The average age of respondents was forty-nine. The greatest

number of respondents were in the 45 to 54 age range with 25.83%. The lowest number of respondents were under 25 with only 3.33% in this group. Groupings older than the under 25 age are fairly equally represented giving a good overall picture for the survey.

TABLE II
(Question #11)
FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY MARITAL STATUS

Status	Frequency	Percent
Single	6	5.00
Married	100	83.33
widowed	13	10.83
<u>divorced or separated</u>	<u>1</u>	<u>.83</u>
TOTALS	120	100.00

The great majority of the respondents were married accounting for 83.33% of the total.

TABLE III
(Question #12)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY SEX

Sex	Frequency	Percent
male	79	67.52
<u>female</u>	<u>38</u>	<u>32.48</u>
TOTALS	117	100.00

The great majority of respondents were male with 67.52% of the total.

TABLE IV
(Question #13)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY INCOME

Income	Frequency	Percent
under \$10,000	16	13.91
\$10,000 - 14,999	16	13.91
\$15,000 - 19,999	25	21.74
\$20,000 - 24,999	19	16.52
<u>\$25,000 and over</u>	<u>39</u>	<u>33.91</u>
TOTALS	115	100.00

The average income level of respondents was \$19,500, with the greatest number in the \$25,000 and over group with 33.91%. The smallest number of respondents were in the groups under \$10,000 and \$10,000 to 14,999 each having 13.91%.

TABLE V
(Question #14)
FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY HOME TYPE

Type	Frequency	Percent
own home	114	95.00
rented home	5	4.17
apartment	1	.83
<u>mobile home</u>	<u>0</u>	<u>.00</u>
TOTALS	120	100.00

Almost everyone surveyed, 95%, owned their own home.

TABLE VI
(Question #15)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY LENGTH OF STAY IN PRESENT LOCATION

Length of Stay	Frequency	Percent
less than 1 year	5	4.17
1-3 years	19	15.83
<u>more than 3 years</u>	<u>96</u>	<u>80.00</u>
TOTALS	120	100.00

By far the greatest percentage of respondents had lived in their present location for three years or more.

TABLE VII
(Question #16)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY
PLANNED LENGTH OF STAY IN PRESENT LOCATION

Length of Stay	Frequency	Percent
less than 1 year	9	7.62
one to three years	17	14.41
<u>more than three years</u>	<u>92</u>	<u>77.97</u>
TOTALS	118	100.00

Seventy-eight percent of the respondents planned to live in their present location more than three years.

TABLE VIII

(Question #17)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY PLANNED
LENGTH OF STAY IN STILLWATER AREA

Length of Stay	Frequency	Percent
less than one year	6	5.04
one to three years	6	5.04
<u>more than three years</u>	<u>107</u>	<u>89.92</u>
TOTALS	119	100.00

Nearly ninety percent of the respondents plan to live in the Stillwater area for longer than three years. Since only seventy-eight percent planned to stay in their present location (Table VII) compared to the 90% planning to stay in this area it could be assumed that the twelve percent difference would indicate people who intend to move into another home in the Stillwater area.

TABLE IX
(Question #18)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY AGE OF HOME IN WHICH THEY LIVE

Age of Home	Frequency	Percent
less than three years	9	7.56
three to ten years	56	47.06
ten to twenty years	33	27.73
<u>over twenty years</u>	<u>21</u>	<u>17.65</u>
TOTALS	119	100.00

Nearly half of the homes (47%) in the survey were in the three to ten year age bracket. The over twenty year bracket accounted for a great majority of the remaining number of homes with about 18%. There were relatively few new homes, three years or younger.

The typical respondent was a 47 year old male with an income substantially above Stillwater's median income of \$8,500, married, has owned his own home three or more years and is planning to stay there for some time. Thus it is felt that this survey would not truly reflect the buying habits or preferences of single persons, those living in apartments, mobile homes or rental homes, young people or those with low incomes.

The survey data presented later will indicate that the greater the income of the respondents the more is being spent on gardening. Thus the converse is true that the lower the income the less spent on

gardening. Therefore, it is felt that those people with a higher income will be of greater interest to the garden center industry.

The Horticultural Research Institute concluded that, "the single most vital aspect of any business, nursery or otherwise, is the customer. Knowing and targeting on the best potential customer will more favorably influence sales volume and thereby reduce unit overhead costs". (6)

Padgett and Aaron (6), in a study in Georgia, stressed the fact that any business selling its products or services to a particular group of people can be much more effective if it knows something about the behavior of potential customers.

In this section of the findings expenditure patterns of respondents in the lawn and garden supplies and equipment areas are discussed.

TABLE X

(Question #1)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BASED
ON ANNUAL EXPENDITURE FOR SUPPLIES

Expenditure on Supplies	Frequency	Percent
under \$25.00	23	19.17
25 - 49	34	28.33
50 - 99	26	21.67
100 - 250	26	21.67
<u>250 or more</u>	<u>11</u>	<u>9.17</u>
TOTALS	120	100.00

Percentage responses were spread relatively evenly through the first four categories with the \$25 - \$49 group being slightly greater at 28% compared with approximately 20% in the others. The \$250 or more category had only 9% of the total. This was felt to be a reasonable distribution as it would be unusual for anyone to spend over \$250 on their supplies unless they were doing a complete landscape remodeling.

TABLE XI

(Question #2)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BASED
ON ANNUAL EXPENDITURE FOR EQUIPMENT

Expenditure on Equipment	Frequency	Percent
under \$25	66	55.46
25 - 49	19	15.97
50 - 99	13	10.92
100 - 250	15	12.61
<u>over 250</u>	<u>6</u>	<u>5.04</u>
TOTALS	119	100.00

Over half of the respondents (55%) spent less than \$25 for lawn equipment. Nearly 40% spent between \$25 and \$250 and only 5% spent over \$250. This was considered an excellent response spread. On a percentage basis, very few people would be buying equipment such as lawn mowers, rototillers, etc. which would run costs over \$250. A certain

percentage would be purchasing garden carts, fertilizer spreaders, etcetera, which would put them in categories over \$25 when included with annual purchases of replacement tools and the like which would fall into the equipment category. The majority of people would be accounted for on a yearly basis in the under \$25 category primarily spending for replacement tools or an occasional new item.

The third section of the questionnaire deals with the location from which the majority of the lawn and garden supplies and equipment are purchased.

TABLE XII
(Question #3)
FREQUENCY OF DISTRIBUTION OF RESPONDENTS BASED
ON PURCHASE SITES

City	Frequency	Percent
Stillwater	108	93.10
Tulsa	1	0.86
Oklahoma City	3	2.59
<u>Other</u>	<u>4</u>	<u>3.45</u>
TOTALS	116	100.00

The overwhelming majority (93%) of respondents did the majority of their shopping in Stillwater. An insignificant amount of shopping was done in other cities.

TABLE XIII
(Question #4)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BASED ON
LOCATION OF MAJORITY PURCHASES IN STILLWATER

Location	Frequency	Percent
Reichman's	4	3.45
Garden Gate	51	43.97
Gibson's	16	13.79
T G & Y	10	8.62
Inciardi's	4	3.45
Stillwater Floral	12	10.35
<u>Other</u>	<u>19</u>	<u>16.37</u>
TOTALS	116	100.00

Nearly half of the respondents (43%) made the majority of their purchases at the Garden Gate whose main emphasis is in the lawn and garden area. The next two highest percentages were Gibson's with 14% and Stillwater Floral with 10%. Neither of these shops main emphasis is on the lawn and garden, the first being a discount house and the second a florist shop. The rest of the responses were fairly evenly divided between other shops in town with some of the ones falling in the "other" category being A & M Termite (spraying) and Ahrberg Milling (fertilizers).

TABLE XIV
(Question #5)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY
LOCATION OF SHOPPING IN OTHER CITIES

Location	Frequency	Percent
discount houses	19	22.62
chain stores	18	21.45
nurseries and garden centers	32	38.10
Stillwater shoppers mistakenly making responses to this question	15	17.86
TOTALS	84	100.00

Of the persons making purchases in other cities 38% did so in lawn and garden centers. Slightly over 20% each made their purchases at chain stores or discount houses. Almost another 20% wrote in responses to this question such as they never shopped in other cities or marked one of the given answers indicating it was not part of their major purchasing. This question's responses probably gives more of an indication of where respondents shop when in other cities rather than where the people making the majority of their purchases in those cities shop.

TABLE XV
(Question #6)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS BY
REASON FOR THEIR SHOPPING CHOICE LOCATION

Reason	Frequency	Percent
convenient location	43	36.75
quality of merchandise	54	46.15
advertised specials	35	29.92
assortment of products	46	39.32
convenient hours	21	17.95
information and advice	30	25.64
maintenance and service	4	3.42
free delivery	7	5.98
other	5	4.27

This category does not total 100% as respondents were able to check as many or as few of the categories as they felt applied to them. Nearly 50% of the respondents felt that the quality of merchandise was important to them in shopping where they did. Almost 40% felt that the assortment of products available and the store's location influenced them in their choice of shopping location. Thirty percent shopped for advertised specials, while 25% shopped where they could get some information and advice. Another 18% shopped at a chosen location because of the convenience of store hours. Five percent or less shopped because of maintenance and service and delivery policies. A few wrote

in other responses such as personal friendships with store owners, et-cetera.

The final section of the questionnaire dealt with the shopping preferences of the respondents, i.e. the things that were important to them or what they looked for in a garden center.

TABLE XVIA

(Question #7)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY PREFERENCE OF DAY OF WEEK

Day of Week	Frequency	Percent
weekdays	52	48.15
Saturday	52	48.15
Sunday	4	3.70
TOTALS	108	100.00

Forty-eight percent of the respondents preferred to do their shopping for lawn and garden supplies and equipment on weekdays. Another 48% preferred to do their shopping on Saturday. Only 4% of the respondents wanted to shop on Sunday.

TABLE XVIB
(Question #7)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY PREFERENCE OF HOUR OF DAY

Hours of Day	Frequency	Percent
morning	54	50.00
afternoon	41	37.96
evening	13	12.04
TOTALS	108	100.00

Fifty percent of the respondents preferred to make their purchases between eight a.m. and 12 noon. Thirty-eight percent preferred to shop between the hours of 12 noon and five p.m. The remaining 12% would like to shop in the evening after five.

TABLE XVII
(Question #8)

FREQUENCY OF DISTRIBUTION OF RESPONDENTS
BY SEX OF SUPPLY PURCHASER

Sex	Frequency	Percent
male	59	50.00
female	37	31.36
male/female combination	22	18.64

TABLE XVII (Continued)

Sex	Frequency	Percent
TOTALS	118	100.00

The men most frequently made the purchases accounting for 50% of the respondents. The women accounted for 31% The other 19% consisted of a man and woman team purchase.

TABLE XVIII

(Question #9)

PERCENTAGE DISTRIBUTION OF RESPONDENTS
BASED ON STORE IDEALS

	very important	important	less important	least important	Total
quality of product	62.61	35.65	.87	.87	100.00
types of ser- vices available	22.86	38.10	21.91	17.14	100.00
price	45.13	41.59	10.62	2.66	100.00
variety of pro- ducts available	37.50	49.11	11.61	1.79	100.00
cleanliness of store	11.22	33.64	37.38	17.76	100.00
convenience of location	17.12	38.74	33.33	10.81	100.00

TABLE XVIII (Continued)

	very important	important	less important	least important	Total
knowledgeable employees	43.64	35.46	15.46	5.46	100.00
decor of building	0.00	13.76	33.03	53.21	100.00
store hour	13.27	38.94	30.97	16.81	100.00
rare or unusual products	2.78	9.26	24.07	63.89	100.00

Comparing respondent ratings under the very important grouping, quality of product was listed as most important with 63% of the total giving it top priority. This was followed by price with 45% of the respondents placing a very important rating on it. The information available from employees category followed closely with 44%. Next came variety of products available with 38% ranking it very important. Then came types of services available, 23% and convenience of location, 17%. Store hours were listed as very important by 13%, cleanliness, 11%, rare or unusual products, 3%, and decor of building, 0%.

CHAPTER IV

COMPARATIVE ANALYSIS OF DATA

In chapter three the numerical responses to the questions in the study were established. In this chapter, through the use of Chi Square and Procedure Correlation, the responses will be analyzed to provide comparative data from which to draw conclusions. These conclusions should allow members of the lawn and garden industry to make decisions based on the buying habits and preferences of those people spending the most on lawns and gardens.

Much of the following data represents correlations that a person might assume were true through reason and logic. However, reason and logic varies among persons depending on individual preferences and feelings. Therefore, conclusions based on 120 random samples give a more accurate base for drawing conclusions.

In looking at the amount of money spent by the individuals in the survey on plants and plant care products (Question 1) a direct relationship became apparent. The more money that the respondent spent on supplies the more important quality, assortment of products available, services, and delivery became. Also, the more spent on supplies the greater the respondents' income and the greater the length of time they planned to stay in their present location. Conversely, the older the home, the less money was spent on supplies.

The more money respondents spent on equipment the more spent on

supplies. Service and delivery were more important with increased equipment purchases. Greater income level meant greater equipment expenditure. Also, the more spent on equipment the more often the man was doing the buying. The one inverse relationship in this area stated that the older the home the less equipment expenditure.

Those people indicating that the quality of the product purchased was important also indicated that the assortment of products available and information and advice were also important. To this group advertised specials were unimportant.

People shopping the advertised specials were less concerned with quality and assortment of products.

As the age of the respondent increased the need for information and advice decreased.

In making comparisons of the respondents' ratings of various aspects of garden centers (Question 9) with the other questions on the survey we find the following information.

People looking for service also looked for quality of product, information and advice, and delivery of materials. They also felt that the decor of the store was important. They did not feel that store hours or advertised specials were important.

Respondents to whom price was important were not concerned with the decor of the store but were concerned with how much they spent on equipment. Those to whom price was important tended to fall in the lower income brackets on the questionnaire.

Where variety of products was important quality was also important.

Where cleanliness was important service, deliver, decor and location of the store, and the availability of rare or unusual products was

important. The combination of cleanliness and store location also tended to be more important to the women in the survey than to the men.

Those people interested in the store decor were not particularly interested in price but were interested in cleanliness, service, information, store hours and rare or unusual products. Subsequently, those people interested in store hours were also interested in the decor, but they were not interested in quality of product as a criterion for shopping. People looking for rare or unusual products felt that the decor and cleanliness of the store were important.

Taking these same questions and putting them into a Chi Square format brings out the following further information.

TABLE XIX

TABLE OF SUPPLY PURCHASES BY AGE OF HOME

Supplies Frequency Cell Chi ² Percent Row Pct Col Pct	Home	Age of Home in Years				Total
		less than 3 yrs	3-10 yrs	10-20 yrs	over 20 yrs	
		1	2	3	4	
1	0	0	6	8	9	23
	.	1.7	2.1	0.4	6.0	
under \$25	.	0.00	5.04	6.72	7.56	19.33
	.	0.00	26.09	34.78	39.13	
	.	0.00	10.71	24.24	42.86	
2	0	1	16	13	4	
	.	1.0	0.0	1.4	0.7	34
\$25-\$49	.	0.84	13.45	10.92	3.36	
	.	2.94	47.06	38.24	11.76	28.57
	.	11.11	28.57	39.39	19.05	

TABLE XIX (Continued)

Supplies Frequency Cell Chi2 Percent Row Pct Col Pct	Home	Age of Home in Years				Total
		less than 3 yrs	3-10 yrs	10-20 yrs	over 20 yrs	
		1	2	3	4	
3	1	3	14	6	2	
	.	0.7	0.4	0.1	1.3	25
\$50-\$99	.	2.52	11.76	5.04	1.68	
	.	12.00	56.00	24.00	8.00	21.01
	.	33.33	25.00	18.18	9.52	
4	0	5	11	4	6	
	.	4.7	0.1	1.4	0.4	26
\$100-\$250	.	4.20	9.24	3.36	5.04	
	.	19.23	42.31	15.38	23.08	21.85
	.	55.56	19.64	12.12	28.57	
5	0	0	9	2	0	11
	.	0.8	2.8	0.4	1.9	
over \$250	.	0.00	7.56	1.68	0.00	9.24
	.	0.00	81.82	18.18	0.00	
	.	0.00	16.07	6.06	0.00	
TOTAL	.	9	56	33	21	119
	.	7.56	47.06	27.73	17.65	100.00

CHI-SQUARE=28.443 WITH 12 D.F., PROB OF GREATER VALUE UNDER H0=0.0048

The data on this table indicates that, generally, the younger the home in which the respondent lives the more money they spend on supplies for the home.

TABLE XX

TABLE OF IMPORTANCE OF VARIETY BY SEX OF RESPONDENT

Sex	Frequency	Variety Rt				Total
		most important	important	less important	least important	
Cell Chi2	Percent	1	2	3	4	
Row Pct	Col Pct
.	0	2	0	1	0	.
.
.
.
1	4	24	45	4	2	
.	.	0.5	1.4	2.2	0.3	75
male	.	22.02	41.28	3.67	1.83	
.	.	32.00	60.00	5.33	2.67	68.81
.	.	60.00	81.82	33.33	100.00	
2	4	16	10	8	0	
.	.	1.0	3.0	4.8	0.6	34
female	.	14.68	9.17	7.34	0.00	
.	.	47.06	29.41	23.53	0.00	31.19
.	.	40.00	18.18	66.67	0.00	
TOTAL	.	40	55	12	2	109
.	.	36.70	50.46	11.01	1.83	100.00

CHI-SQUARE=13.726 WITH D.F., PROB OF GREATER VALUE UNDER HO=0.0033

This table indicates that men tend to look for more variety in the products they buy than do women.

TABLE XXI

TABLE OF IMPORTANCE OF CLEANLINESS BY SEX OF RESPONDENT

Sex	Frequency	Clean Rt				Total
		most important	important	less important	least important	
Cell	Chi2	1	2	3	4	
Percent	Row Pct					
Col Pct						
.	0	0	1	0	2	
.
.
.
1	2	6	24	33	14	
.	0.8	0.1	0.6	0.0		77
male	5.61	22.43	30.84	13.08		
.	7.79	31.17	42.86	18.18		71.96
.	50.00	66.67	82.50	73.68		
2	8	6	12	7	5	
.	2.1	0.4	1.6	0.0		30
female	5.61	11.21	6.54	4.67		
.	20.00	40.00	23.33	16.67		28.04
.	50.00	33.33	17.50	26.32		
TOTAL	.	12	36	40	19	107
.	11.21	33.64	37.38	17.76		100.00

CHI-SQUARE=5.598 WITH 3 D.F., PROB OF GREATER VALUE UNDER HO=0.1329

Based on response comparisons in this table it is indicated that women are a little more concerned with store cleanliness than are men.

CHAPTER V

CONCLUSION

As was stated in the beginning, it is important to people already fulfilling lawn and garden retailing functions in society and to those planning to begin in this field to know something about the people most vital to them - the customer. The customer that needs to be identified is the one that spends the largest amount of money per year on his lawn and garden. This survey has produced a clearer picture of this customer.

This customer tends to be a man with a higher than median income. His age is relatively unimportant to his expenditure totals (Tables XXII and XXIII, Appendix pages 39 to 41) but the age of his home is important. The study had a limited number of respondents whose homes were under three years of age (Table XXIV, Appendix page 43 and Table XIX, page 26) but their responses showed a tendency to spend small sums of money. This could possibly be accounted for in the fact that they have just moved into the home having to make a down payment which would limit the funds for extensive lawn and garden activities. Those customers whose home is between the ages of three to ten years or that have lived at least three years in that location spend more on the lawn and garden than any other group (Tables XXIV, XXV, and XXVI, Appendix pages 43, 45, and 47, and Table XIX, page 26). Thus these customers should become the center of focus for members of the lawn

and garden industry. It is these people who are going to be most often shopping in a lawn and garden store and the type that the retailer should attempt to attract to his particular location.

This customer is equally happy shopping on weekdays or Saturdays but shops primarily for quality. His next criterion in the choice of a shopping location includes the variety or assortment of products available to him, the information store personnel can provide, the services they offer him, and the price of their product. Of less importance but still worthy of some consideration to the customer are the store's location, hours, decor, and advertised specials.

Subsequently, a store's decisions as to products, employees, and services to offer based on this "best" customer's requirements become primary decisions in order to attract "best" customers.

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APPENDIXES

APPENDIX A

CONSUMER SURVEY

Please circle one response for each question unless otherwise requested.

1. Which of the following categories best describes the amount you spent during the past 12 months on lawn and garden supplies i.e. plants, fertilizer?
 1. under \$25
 2. \$25 to \$49
 3. \$50 to \$99
 4. \$100 to \$250
 5. \$250 or more

2. Which of the following categories best describes the amount you spent during the past 12 months on lawn and garden equipment i.e. pruning shears, lawn mower, etc.?
 1. under \$25
 2. \$25 to \$49
 3. \$50 to \$99
 4. \$100 to \$250
 5. over \$250

3. Are the majority of these purchases made in
 1. Stillwater
 2. Tulsa
 3. Oklahoma City
 4. Elsewhere

4. Of the lawn and garden purchases made in Stillwater, at which location do you shop most frequently?
 1. Reichman's
 2. Garden Gate
 3. Gibson's
 4. T G & Y
 5. Inciardi's
 6. other _____ (please specify)

5. Of the lawn and garden purchases made in Tulsa or Oklahoma City, at which location do you shop most frequently?
 1. discount houses (Target, Gibson's, Walmart, etc.)
 2. chain stores (Sears, Penney's, T G & Y, etc)
 3. nurseries and garden centers (Horn Brothers, Wolfes, Stringer Brothers, etc.)

6. Which of the following best describe the reason(s) for your choice of shopping location? (Circle as many as appropriate)

- | | |
|-------------------------------------|---|
| 1. convenient location | 5. convenient hours |
| 2. quality of merchandise | 6. information & advice |
| 3. advertised specials | 7. lawn maintenance, tree planting services, etc. |
| 4. assortment of products available | 8. free delivery |

7. At what time do you most prefer to shop for lawn and garden supplies?

Day of week (circle one)

Hour of day (circle one)

1. weekdays
2. Saturday
3. Sunday

1. morning - eight to noon
2. afternoon - noon to five
3. evening - five to nine

8. Who in your home makes most lawn and garden supply purchases?

1. man
2. woman
3. man/woman together

9. Rate each of the following as to their importance to you in a lawn and garden center with number 1 being very important and number 4 being the least important.

	very important	important	less important	least important
quality of products	1	2	3	4
types of service available (information, design service, planting, etc.)	1	2	3	4
price	1	2	3	4
variety of products available	1	2	3	4
cleanliness of store	1	2	3	4
convenience of location	1	2	3	4
knowledgeable employees	1	2	3	4
decor of building	1	2	3	4
store hours	1	2	3	4
rare or unusual products	1	2	3	4

10. In which range does your age fall?
- | | | |
|-------------|-------------|----------------|
| 1. under 25 | 3. 35 to 44 | 5. 55 to 64 |
| 2. 25 to 34 | 4. 45 to 54 | 6. 65 and over |
11. Marital status:
1. single 2. married 3. widowed 4. divorced or separated
12. Sex
1. male 2. female
13. Which of the income groups below best describes the total combined family income of all the members of your family who live in your home?
- | | |
|-------------------------|-------------------------|
| 1. under \$10,000 | 4. \$20,000 to \$24,999 |
| 2. \$10,000 to \$14,999 | 5. \$25,000 or over |
| 3. \$15,000 to \$19,999 | |
14. Do you live in
1. your own home 2. rented home 3. an apartment 4. a mobile home
15. How long have you lived at your present location?
1. less than 1 year 2. 1-3 years 3. more than 3 years
16. How long do you plan to live at your present location?
1. less than 1 year 2. 1-3 years 3. more than 3 years
17. How long do you plan to live in Stillwater or this vicinity?
1. less than 1 year 2. 1-3 years 3. more than 3 years
18. Approximately how old is the home in which you now live?
1. less than 3 years 2. 3-10 years 3. 10-20 years
4. over 20 years

APPENDIX B

October 1, 1976

Dear Consumer,

I need your help in fulfilling part of the requirements for a master's degree at the University. I am conducting a survey of the residents of Stillwater as to their lawn and garden shopping practices. If you or the person in your home who buys most of your outdoor plants, fertilizers, tools, etc., could take a few minutes to fill out the attached questionnaire, I would sincerely appreciate it.

No writing is required in filling out the questionnaire. Simply circle the answer or answers that are most applicable to you. There are no right or wrong answers. The answer you give is the one that best shows how you feel and what you think.

Even if you don't do much to your yard, you are an important part of the survey. Each and every person who receives a copy of the questionnaire is vital.

You will find in filling out the questionnaire that nowhere does it ask for your name and address. The information you give will be strictly confidential.

I sincerely appreciate the time you are taking to fill this out for me. Please return the survey in the enclosed postage paid envelope.

Sincerely,

Phyllis Roggow
Graduate Student
Department of Horticulture

Enclosure

APPENDIX C

October 12, 1976

Dear Consumer:

If you filled out the questionnaire I mailed to you two weeks ago you can disregard the remainder of this letter; and thank you very much for your cooperation.

If you haven't filled out the questionnaire I'd like to make another plea for you to do so. The information that you will be filling out on the questionnaire is vital to me in my efforts to fulfill degree requirements. If you have any questions about the questionnaire or if you have lost the first copy feel free to call me. I would be glad to answer your questions or mail you another questionnaire. You can call me at 624-5419 during the school day.

Again, let me thank you for the few minutes you will be taking in filling out the questionnaire. I sincerely appreciate it.

Sincerely,

Phyllis Roggow
Graduate Student
Department of Horticulture

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APPENDIX D

TABLE XXII

TABLE OF SUPPLY EXPENDITURE BY AGE OF RESPONDENT

Supplies Frequency Cell Chi2 Percent Row Pct Col Pct	Age						Total
	under 25	25-34	35-44	45-54	55-64	65 and over	
	1	2	3	4	5	6	
1	1	3	4	3	7	5	23
	0.1	0.4	0.0	1.5	2.2	0.1	
under \$25	0.83	2.50	3.33	2.50	5.83	4.17	19.17
	4.35	13.04	17.39	13.04	30.43	21.74	
	25.00	13.65	21.05	9.68	33.33	21.74	
2	3	6	6	9	2	8	34
	3.1	0.0	0.1	0.0	2.6	0.3	
\$25-\$49	2.50	5.00	5.00	7.50	1.67	6.67	28.33
	8.82	17.65	17.65	26.47	5.88	23.53	
	75.00	27.27	31.58	29.03	9.52	34.78	
3	0	5	2	9	6	4	26

TABLE XXII (Continued)

Supplies Frequency Cell Chi2 Percent Row Pct Col Pct	under 25 1	25-34 2	35-44 3	45-54 4	55-64 5	65 and over 6	Total
\$ 50-\$99	0.9 0.00 0.00 0.00	0.0 4.17 19.23 22.73	1.1 1.67 7.69 10.53	0.8 7.50 34.62 29.03	0.5 5.00 23.08 28.57	0.2 3.33 15.38 17.39	21.67
4	0	6	4	8	5	3	26
\$100-\$250	0.9 0.00 0.00 0.00	0.3 5.00 23.08 27.27	0.0 3.33 15.38 21.05	0.2 6.67 30.77 25.81	0.0 4.17 19.23 23.81	0.8 2.50 11.54 13.04	21.67
5	0	2	3	2	1	3	11
\$250 or more	0.4 0.00 0.00 0.00	0.0 1.67 18.18 9.09	0.9 2.50 27.27 15.79	0.2 1.67 18.18 6.45	0.4 0.83 0.09 4.76	0.4 2.50 27.27 13.04	9.17
TOTAL	4 3.33	22 18.33	19 15.83	31 25.83	21 17.50	23 19.17	120 100.00

CHI-SQUARE = 18,325 WITH 20 D.F., PROB OF GREATER VALUE UNDER HO = 0.5660

APPENDIX E

TABLE XXIII

TABLE OF EQUIPMENT EXPENDITURE BY AGE OF RESPONDENT

Equipment Frequency Cell Chi2 Percent Row Pct Col Pct	Age						Total
	under 25	25-34	35-44	45-54	55-64	65 and over	
	1	2	3	4	5	6	
.	0	0	0	0	0	1	.
.
.
.
1	4	12	9	14	12	15	66
	1.4	0.0	0.2	0.6	0.0	0.6	
under \$25	3.36	10.08	7.56	11.76	10.08	12.61	55.46
	6.06	18.18	13.64	21.21	18.18	22.73	
	100.00	54.55	47.37	45.16	57.14	68.18	
2	0	4	5	5	3	2	19
	0.6	0.1	1.3	0.0	0.0	0.7	
\$25-\$49	0.00	3.36	4.20	4.20	2.52	1.68	15.97
	0.00	21.05	26.32	26.32	15.79	10.53	
	0.00	18.18	26.32	16.13	14.29	9.09	

TABLE XIII (Continued)

Equipment Frequency Cell Chi2 Percent Row Pct Col Pct	Age						Total
	under 25	25-34	35-44	45-54	55-64	65 and over	
	1	2	3	4	5	6	
3	0	4	2	3	2	2	13
\$50-\$99	0.4	1.1	0.0	0.0	0.0	0.1	10.92
	0.00	3.36	1.68	2.52	1.68	1.68	
	0.00	30.77	15.38	23.08	15.38	15.38	
	0.00	18.18	10.53	10.53	9.52	9.09	
4	0	1	1	6	4	3	15
\$100-\$250	0.5	1.1	0.8	1.1	0.7	0.0	12.61
	0.00	0.84	0.84	5.04	3.36	2.52	
	0.00	6.67	6.67	40.00	26.67	20.00	
	0.00	4.55	5.26	19.35	19.05	13.64	
5	0	1	2	3	0	0	6
\$250 or more	0.2	0.0	1.1	1.3	1.1	1.1	5.04
	0.00	0.84	1.68	2.52	0.00	0.00	
	0.00	16.67	33.33	50.00	0.00	0.00	
	0.00	4.55	10.53	9.68	0.00	0.00	
TOTAL	4	22	19	31	21	22	6
	3.36	18.49	15.97	26.05	17.65	18.49	100.00

CHI = 16.340 WITH 20 D.F., PROB OF GREATER VALUE UNDER H0 = 0.6953

APPENDIX F

TABLE XXIV

TABLE OF EQUIPMENT EXPENDITURE BY AGE OF HOME

Equipment Frequency Cell Chi2 Percent Row Pct Col Pct	Home	less than 3 yrs	3-10	10-20	over 20 yrs	Total
Col Pct	.	1	2	3	4	
.	0	0	0	1	0	.
.
.
.
1	1	1	26	19	16	65
under \$25	.	0.2	0.8	0.1	1.7	
.	.	3.39	22.03	16.10	13.56	55.08
.	.	6.15	40.00	29.23	24.62	
.	.	44.44	46.43	59.38	76.19	
2	0	1	9	7	2	19
\$35-\$49	.	0.1	0.0	0.7	0.6	
.	.	0.85	7.63	5.93	1.69	16.10
.	.	5.26	47.37	36.84	10.53	
.	.	11.11	16.07	21.88	9.52	
3	0	1	9	3	0	15
\$50-\$99	.	0.0	1.3	0.1	2.3	
.	.	0.85	7.63	2.54	0.00	12.71
.	.	7.69	69.23	23.08	0.00	
.	.	11.11	16.07	9.38	0.00	
4	0	1	5	0	0	6
\$250 or more	.	0.6	1.6	1.6	1.1	
.	.	0.85	4.24	0.00	0.00	5.08
.	.	16.67	83.33	0.00	0.00	
.	.	11.11	8.93	0.00	0.00	

TABLE XXIV (Continued)

Equipment Frequency	Home	less than 3 yrs	3-10	10-20	over 20 yrs	Total
Cell Chi2						
Percent						
Row Pct						
Col Pct	.	1	2	3	4	
TOTAL	.	9	56	32	21	118
	.	7.63	47.46	27.12	17.90	100.00

CHI-SQUARE = 13.737 WITH 12 D.F., PROB OF GREATER VALUE UNDER HO=0.3178

APPENDIX G

TABLE XXV

TABLE OF SUPPLY EXPENDITURE BY LENGTH OF TIME IN HOME

Supplies Frequency Cell Chi2 Percent Row Pct Col Pct	Time in Home			Total
	less than 1 yr	1-3 yrs	over 3 yrs	
	1	2	3	
1	2	3	18	23
under \$25	1.1	0.1	0.0	
	1.67	2.50	15.00	19.17
	8.70	13.04	78.26	
	40.00	15.79	18.75	
2	1	6	27	34
\$25-\$49	0.1	0.1	0.0	
	0.83	5.00	22.50	28.33
	2.94	17.65	79.41	
	20.00	31.58	28.13	
3	0	6	20	26
\$50-\$99	1.1	0.9	0.0	
	0.00	5.00	16.67	21.67
	0.00	23.08	76.92	
	0.00	31.58	20.83	
4	2	4	20	26
\$100-\$250	0.8	0.0	0.0	
	1.67	3.33	16.67	21.67
	7.69	15.38	76.92	
	40.00	21.05	20.83	
5	0	0	11	11
\$250 or more	0.5	1.7	0.6	
	0.00	0.00	9.17	9.19
	0.00	0.00	100.00	
	0.00	0.00	11.46	

TABLE XXV (Continued)

Supplies Frequency Cell Chi2 Percent Row Pct Col Pct	Time in Home			Total
	less than 1 yr 1	1-3 yrs 2	over 3 yrs 3	
TOTAL	5 4.17	19 15.83	96 80.00	120 100.00

CHI-SQUARE = 6984 WITH 8 D.F., PROB OF GREATER VALUE UNDER HO=0.5384

APPENDIX H

TABLE XXVI

TABLE OF EQUIPMENT EXPENDITURE BY LENGTH OF TIME IN HOME

Equipment Frequency Cell Chi2 Percent Row Pct Col Pct	Time in Home			Total
	less than 1 yr	1-3 yrs	over 3 yrs	
	1	2	3	
.	0	0	1	.
.
.
.
1	3	11	52	66
under \$25	0.0	0.0	0.0	
	2.52	9.24	43.70	55.46
	4.55	16.67	78.79	
	60.00	57.89	54.74	
2	1	3	15	19
\$25-\$49	0.1	0.0	0.0	
	0.84	2.52	12.61	15.97
	5.26	15.79	78.95	
	20.00	15.79	15.79	
3	1	0	12	13
\$50-\$99	0.4	2.1	0.3	
	0.84	0.00	10.08	10.92
	7.69	0.00	92.31	
	20.00	0.00	12.63	
4	0	3	12	15
\$100-\$250	0.6	0.2	0.0	
	0.00	2.52	10.08	12.61
	0.00	20.00	80.00	
	0.00	15.79	12.63	

TABLE XXVI (Continued)

Equipment Frequency Cell Chi2 Percent Row Pct Col Pct	Time in Home			Total
	less than 1 yr	1-3 yrs	over 3 yrs	
	1	2	3	
5	0	2	4	6
	0.3	1.1	0.1	
\$250 or more	0.00	1.68	3.36	5.04
	0.00	33.33	66.67	
	0.00	10.53	4.21	
TOTAL	5	19	95	119
	4.20	15.97	79.83	100.00

CHI-SQUARE = 5.106 WITH 8 D.F., PROB OF GREATER VALUE UNDER HO = 0.7462

VITA

Phyllis Ann Roggow

Candidate for the Degree of

Master of Science

Thesis: GARDEN CENTERS: A SURVEY OF CLINETELE PREFERENCES

Major Field: Horticulture

Biographical:

Personal Data: Born in Tulsa, Oklahoma, September 13, 1946, the daughter of Mr. and Mrs. J. J. Grigar. Married in Tulsa to Calvin Roggow on November 28, 1970. A daughter, Heather, was added to the family October 16, 1975.

Education: Graduated from Nathan Hale High School in Tulsa in 1964; received the Bachelor of Science degree in Housing and Interior Design from Oklahoma State University in 1968, completed the requirements for the Master of Science degree in Horticulture at Oklahoma State University in May, 1977.

Professional Experience: Three years of experience were gained in Tulsa as a floral designer and bridal consultant. Another year was spent in Stillwater as a floral designer; and two years were spent as a desk supervisor in Willham Residence Hall. The last three years have been spent at Oklahoma State University in the Horticulture Department instructing students in floral design.