August 17, 1959

To the Graduate Council:

I am submitting herewith a thesis written by Jimmy Wayne Bookout entitled "Retailing Nursery Products in Four Counties of Tennessee." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

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RETAILING NURSERY PRODUCTS IN FOUR COUNTIES OF TENNESSEE

A THESIS

Submitted to
The Graduate Council
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

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by

Jimmy Wayne Bookout

August 1959

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ACKNOWLEDGEMENTS

The writer expresses his sincere appreciation to those who made this study possible and who gave their time and effort to assist in the preparation of this manuscript.

My sincere thanks go to Dr. C. E. Fuller who served as chairman of my thesis committee. His continued efforts to improve and assist in the preparation of this thesis are gratefully appreciated.

Special acknowledgement and appreciation is due Mr. Ray T. Britt for his patience and for his invaluable guidance and assistance during the preparation of this thesis.

The writer also wishes to express his appreciation to Dr. R. G. Spitze for his critical reading of this thesis and for helpful suggestions offered.

To Dr. T. J. Whatley, head of the Department, go my sincere thanks for guidance and supervision in a program of graduate study.

Thanks are due Mrs. Elizabeth Elson for proofreading this thesis.

Any omissions in this acknowledgement does not indicate a lack of gratitude.

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CHAPTER I

INTRODUCTION

In 1889 horticultural specialty crops accounted for more than one per cent of the value of total farm production in the United States.[1] During the following 30 years, their value dropped to one-half of one per cent. In 1920 their value again increased and by 1939 it had reached 1.9 per cent. With wartime increases in prices and production of food and feed crops, accompanied by some restrictions on production of other crops, the value of horticultural specialty crops dropped to 1.4 per cent.[2] In 1954, the sale of horticultural specialties represented 3.7 per cent of the value of total farm production.[3]

The growing and marketing of horticultural specialty crops is an important segment of the agricultural economy of Tennessee. A University of Tennessee survey, taken in 1957, showed that the total wholesale and retail sales from nursery products in Tennessee was 5.7 million dollars.[4] The total acreage in nursery crops has increased from 4,332 acres in 1947

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[1]Truman M. Fossum, Trade in Horticultural Specialties, 1890-1950, United States Department of Agriculture, Bureau of Agricultural Economics, Marketing Research Report No. 33, April 1953, p. 5.

[2]Loc. cit.

[3]U. S. Bureau of the Census, United States Census of Agriculture, Vol. I (Washington: Government Printing Office, 1956), p. 906.

[4]Claud L. Scroggs and Ray T. Britt, Characteristics and Practices of Tennessee Nurseries, Agricultural Experiment Station, University of Tennessee, Bulletin No. 300, 1959, p. 32.

to 7,322 acres in 1957, an increase of 69 per cent.[5]

Favorable climatic conditions, an advantageous geographic location, and improved cultural practices of reputable growers has created a widening demand for Tennessee-grown items that fall into the broad category of commercial horticulture. Much of this growth has occurred with the expansion of our nation's economy since World War II. Increased home construction, relatively high personal income, and more leisure time for the country's work force have contributed in great part to this pattern of expanding market outlets.[6]

The marketing of horticultural specialties has received less research attention than has been the case with many other agricultural commodities. Many developments or conditions in the industry have increased the importance of various marketing problems. Truman Fossum has said:

> The specialized character of production originally resulted in highly specialized channels of trade. Many growers were also retailers and this situation has continued in considerable degree to the present time. In 1949 nearly 30 per cent of the retail establishments handling horticultural specialties were also producers of these crops. As many establishments were engaged in retailing as in production.[7]

Statement of the Problem

Despite the increasing importance of nursery products in Tennessee,

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[5] Ibid., p. 3.

[6] Ibid., p. 1.

[7] Truman M. Fossum, "Economic Problems of Horticultural Specialties," United States Department of Agriculture, Agricultural Marketing Service, (Reprinted from: Agricultural Economics Research), January 1954, p. 3.

little is known about the marketing practices and facilities of the retailers. With increased production came the need for research related to marketing these products. The lack of research attention to the economic problems of the industry in the past accentuates the present need for greater emphasis on economic investigations. The need for such research has been expressed by the industry, allied industries, consumers, experiment stations, other research agencies, and the Congress of the United States.[8]

A sound research program in the economics of marketing nursery products is necessary for the development of a more efficient marketing system. Experience has shown that in dealing with economic phenomena, a lack of clear knowledge of facts and forces with which we deal often leads to incalculable waste of time and effort.[9]

Marketing firms and growers of nursery products need usable facts and figures that will aid them in planning and decision-making. Specifically the objectives of this study are: (1) to describe the present marketing practices and facilities used in merchandising nursery products at the retail level; and (2) to point out possible practices which may alleviate some marketing problems, as well as improve marketing efficiency.

With a knowledge of the present operating practices, such as procurement, transportation, services rendered, replacements, advertising, pricing, sales techniques, credit, and receipts, the retailers will be more aware of their operations. With a better understanding of these

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[8] Ibid., p. 7.

[9] Warren K. Trotter, Problems in Marketing Florists Crops, A.E. 983, Agricultural Experiment Station, Cornell University, 1955, p. 2.

practices, they will have the information on which they can base decisions that may improve their present operations.

Method and Scope of Study

The information upon which this study is based was obtained by personal interviews with retailers licensed to sell nursery products in Knox, Hamilton, Davidson, and Shelby Counties, Tennessee. These counties represent at least one sample area from each major geographic division of the state (Figure 1).

Complete coverage of retailers selling nursery products in these counties was impossible due to a reluctance on the part of some of the retailers to give the needed information. However, it was felt that this did not greatly reduce the validity of the findings in this study, since over 65 per cent of the retailers were included. In Knox County a sample of 60 per cent of the retailers was obtained, in Hamilton County 39 per cent, in Davidson County 79 per cent, and in Shelby County 87 per cent. The entire study consisted of 119 retailers from a universe of 182.

The information was systematically recorded by the interviewer on a previously prepared questionnaire (see Appendix). Respondents were interviewed regardless of size or type of operation. By this method, it was possible to get a more complete picture of the marketing practices and facilities of the retailers.

The 119 respondents were grouped into five classifications according to type of operation (Table I). By using these classifications,

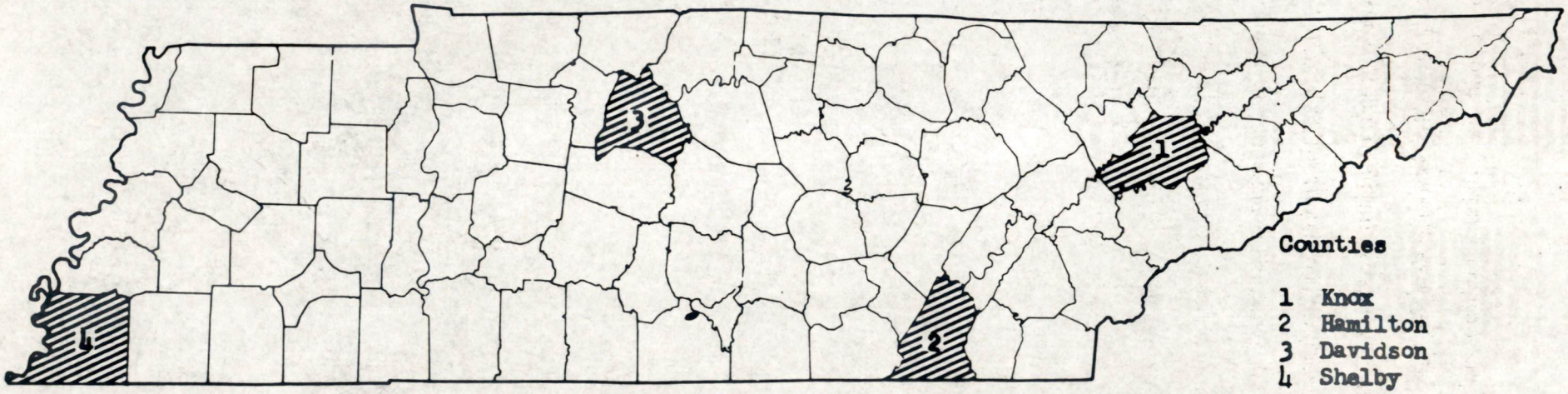


Figure 1. Location of four counties selected for study of retailing nursery products in Tennessee, 1958.

TABLE I

NUMBER OF RETAILERS OF NURSERY PRODUCTS, BY LOCATION
BY TYPE OF OPERATION, TENNESSEE, 1958

County	Number of Firms	Group I	Group II	Group III	Group IV	Group V
		Nurseries and Landscape Firms	Florists, Garden Centers, and Dept. Stores[a]	Drug, Variety, and Dept. Stores[b]	Hardware, Farm & Feed Stores	Grocery Stores
Knox	28	11	5	7	1	4
Hamilton	18	5	2	6	3	2
Davidson	46	14	4	9	2	17
Shelby	27	10	3	8	-	6
Total	119	40	14	30	6	29

[a]Department stores with garden center.

[b]Department stores without garden center.

the differences and/or similarities in each type of operation could be compared and contrasted, with relationships being made more evident. This process gave a more detailed description of present marketing practices and facilities being used.

Definition of Terms

Before any subject can be meaningfully discussed, the exact terminology must be well defined. The following terms are defined according to their use in this study:

Nursery Products. Refers to decidious shrubs, broadleaf evergreen shrubs, needleleaf evergreen shrubs, shade trees, ornamental trees, nut trees, fruit trees, vines, small fruits, perennials, and roses.

Retailer. A licensed operator with an established place of business who sells nursery products at retail.

Other plants. Plants other than those included in the above definition of nursery products. They were usually potted plants.

CHAPTER II

PHYSICAL OPERATIONS OF THE FIRM WITH RESPECT TO NURSERY PRODUCTS

In this chapter an examination was made of some of the physical operations of the retailers of nursery products. The purpose of such an examination was to establish the similarities and differences of each type of operation with respect to procurement practices, transportation of stock, services rendered by the firm, and replacement policies.

Since there appeared to have been no previously set standards in the performance of these physical operations, there was the possibility of discrepencies and inefficiencies existed in these operations.

Procurement Practices

Procurement practices are those functions which the retailers perform when acquiring merchandise to sell to the consuming public. The main objectives in the procurement process are to obtain the desired quality and quantity of nursery stock, at the desired time, and at the least possible price.

Source of Procurement

The nursery was the primary source of supply for all groups except the grocery stores (Table II). With the grocery stores, the stock was obtained from nurseries by a central purchasing agent and allocated to the various stores.

This central buying tended to give economies of scale, and was

TABLE II

SOURCE OF SUPPLY OF NURSERY STOCK BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Source of Supply	Group I Nurseries and Landscape Firms	Group II Florists, Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Nurseries	38	14	20	5	10	87
Central Agency	-	1	11	1	21	34
Grows Own	27	1	-	-	-	28
Total No. of Firms Reporting[c]	40	14	30	6	29	

[a]Department stores with garden center.

[b]Department stores without garden center.

[c]The total number of firms reporting is less than the total of individual firms purchasing from all sources in each group because some firms purchased from more than one source.

helpful in that the individual store manager did not have the experience needed in buying nursery products. Economies were to be gained by buying in large lots from the nursery.

One of the disadvantages to this system of buying was that it became hard to keep the supply regulated. Since the sale of nursery products by grocery stores was of fairly recent origin, difficulty was experienced by individual stores in the handling of nursery products.

Often stock was bought early enough to accommodate the early January and February customers, and it became extremely difficult to protect this stock from the severe freezes that are characteristic of the region during this period. Some sad experiences were revealed by various merchants who did not have the stock properly heeled in during this time of adverse weather conditions. It is possible that some of this stock was sold to the public after it had been damaged. This would account for some of the high losses suffered by these stores. This damage was not recognized by the store operator, and all stock was fully guaranteed and replaced when the damaged stock was reported to the store operators.

Over 72 per cent of the grocery stores purchased through a central agency. However, over 34 per cent of the grocery stores also made additional purchases from nurseries. These purchases were made to supplement the supply received from the central agency. The above total was over 100 per cent because some of the stores made purchases from both sources. This was true for all groups except Group IV.

A higher percentage of the firms in Group II, florists and garden

centers, purchased direct from nurseries than was the case with any other single group: 100 per cent of the firms in this group purchased from nurseries. Ninety-five per cent of the firms in Group I, nurseries and landscape firms, obtained stock from nurseries. In Groups III and IV, two-thirds of the firms used the nursery as a source of supply.

Thirty-six per cent of the firms in Group III obtained their stock through a central agency. This was mainly due to the fact that they were members of a chain.

Twenty-seven out of 40 firms in Group I grew some of their own plants as well as purchasing a part of their supply. Including all five groups, 73 per cent made purchases from nurseries, 29 per cent used a central agency as their source of supply, and 23 per cent grew at least part of their own supply.

Type of Contract

The term contract usually refers to an agreement between two or more persons to do or forebear something. It means entering into a mutual obligation.

Very few of the firms that were studied used a purchase contract in obtaining nursery products (Table III). Of those firms using a contract, an equal percentage used oral and written contracts. Four per cent used a written contract, 4 per cent used an oral contract, and 93 per cent did not use a contract. Once again this percentage total was over 100 because some of the firms used both types of contracts.

Some of the retailers expressed the view that contracts were not worthwhile. They maintained that contracts only served to bind the parties

TABLE III

TYPE OF PURCHASING CONTRACT FOR NURSERY PRODUCTS BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Type of Purchasing Contract	Group I Nurseries and Landscape Firms	Group II Florists, Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Written Contract	-	1	1	-	3	5
Oral Contract	2	2	1	-	-	5
No Contract	38	12	28	6	26	110
Total No. of Firms Reporting	40	14[c]	30	6	29	

[a]Department stores with garden center.

[b]Department stores without garden center.

[c]The total number of firms reporting is less than the total of individual firms using and not using contracts in this group because some firms used both types of contract.

involved, which was undesirable. Since the products were not of measurable quality by any predetermined standards, the writing of a worthwhile contract became very difficult. If the findings in these four counties are fairly representative for the entire state, then this may be a major weakness on the part of the retailers. Without a contract, the retailers' control on the quality of the products purchased is greatly reduced. By using a contract, they could be assured of the quality, the date of delivery, and the amount of delivery, thereby exerting greater retailer control. To make a contract meaningful, some type of predetermined standards would have to be imposed.

Type of Examination Before Purchase

A larger percentage of the firms in Groups I and II, where nursery products accounted for a high percentage of total receipts, purchased on an inspection basis rather than by description (Table IV). This percentage in Group I, 82 per cent, was markedly high when compared to the other groups. Group II, where 62 per cent of the firms purchased by inspection, was the only other group where the number of firms making purchases on an inspection basis was greater than the number of firms making purchases on a descriptive basis.

Six per cent of the firms in Group III bought by inspection, 16 per cent in Group IV, and 10 per cent in Group V. The remainder of the firms in these three groups bought on a descriptive basis, except two cases where purchases were made by both inspection and description. Nursery products comprised a relatively small percentage of the total receipts of the firms in these three groups.

TABLE IV

TYPE OF EXAMINATION BEFORE PURCHASE OF NURSERY PRODUCTS BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Type of Examination	Group I Nurseries and Landscape Firms	Group II Florists, Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Inspection	33	9	2	1	3	48
Description	9	6	29	6	26	76
Total No. of Firms Reporting[c]	40	14	30	6	29	

[a]Department stores with garden center.

[b]Department stores without garden center.

[c]The total number of firms reporting is less than the total of individual firms using different types of examinations because some of the firms used more than one type of examination.

Stock Transportation

The traditional aspect of private carriage is that the owner of the vehicle also owns the goods being transported.[1] There can be no obligation with respect to service in such a case, because both parties to the act of transport are the same. The role of supplier transportation differs, because the vehicle is the property of the seller, and the goods being transported are the property of the buyer. The supplier has the responsibility of safe delivery of goods entrusted to his charge.

It is assumed that anybody who undertakes to transport goods for anyone who asks him is a common carrier. The traditional duties of a common carrier are, in substance, four: (1) the duty of service; (2) the responsibility of safe delivery of goods entrusted to the carrier's charge; (3) the duty to treat all customers without discrimination; and (4) the duty to charge a reasonable and only a reasonable price for the service that is performed.[2]

Common carriers and private carriers were of equal importance as methods of transporting nursery products, when considering all firms studied (Table V). Forty-nine per cent of all firms studied used common carriers and an equal percentage used private carriers. In only 20 per cent of all firms studied did the supplier furnish the transportation for moving stock to the retailer. The above percentages total over 100 because some of the firms used more than one mode of transportation.

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[1]Stuart Daggett, Principles of Inland Transportation (4th ed.; New York: Harper and Brothers, 1955), p. 229.

[2]Ibid., pp. 231-233.

TABLE V

METHOD OF STOCK TRANSPORTATION BY CLASSES OF RETAILERS OF NURSERY PRODUCTS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Method of Stock Transportation	Group I	Group II	Group III	Group IV	Group V	Total
	Nurseries and Landscape Firms	Florists, Garden Centers, and Dept. Stores[a]	Drug, Variety, and Dept. Stores[b]	Hardware, Farm & Feed Stores	Grocery Stores	
	Number of Firms Reporting					
Common Carrier	8	4	23	3	21	59
Supplier	12	8	2	1	1	24
Private Carrier	31	7	6	3	12	59
Total No. of Firms Reporting[c]	40	14	30	6	29	

[a]Department stores with garden center.

[b]Department stores without garden center.

[c]The total number of firms reporting is less than the total of individual firms using all methods of transportation in each group because some firms used more than one method of transportation.

A higher percentage of the firms in Group I, 77 per cent, used private carriers. Fifty per cent of the firms in Group IV used private carriers and an equal percentage used common carriers. The common carrier was by far the most important mode of transportation of stock for Groups III and IV; 76 per cent of the firms in Group III and 72 per cent of the firms in Group V used this method.

Services Rendered by the Firm

The services rendered by the firm give some indication of the firm's active participation in the promotion of nursery products in his own firm as well as in the industry as a whole. These services were examined to determine the extent of their use. The importance attached to each service for each group, as indicated by the number of firms offering that service, was determined.

There was a direct relationship between the offering of the various services and the per cent mark-up on the items sold (Tables VI and XIV). Those firms in the groups where more services were offered had a higher mark-up than those who offered fewer services.

A positive relationship between the volume of business with respect to nursery products and the number of firms in each group offering the various services was evident. This volume was reflected by the percentage of total retail sales that nursery products comprised for each group. Invariably, more firms offered more services in Groups I and II; in these groups, nursery products made up a relatively large percentage of their total retail sales volume.

TABLE VI

SERVICES RENDERED BY THE FIRM WITH RESPECT TO NURSERY PRODUCTS BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Services Rendered	Group I Nurseries and Landscape Firms	Group II Florists Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Provided Professional Consultant	38	12	-	2	1	53
Plans for Customer	36	11	-	-	-	47
Landscape Service	37	10	-	-	-	47
Delivery Service	28	12	-	2	-	42
Spoke at Garden Clubs	17	8	-	-	-	25
Furnished Facilities for Garden Club Meetings	10	9	-	-	-	19
Other	3	7	-	-	1	11
Total No. of Firms Reporting[c]	40	14	30	6	29	

[a]Department stores with garden center.

[b]Department stores without garden center.

[c]The total number of firms reporting is less than the total of individual firms providing services in each group because some firms provided more than one service.

Professional Consultant

The primary duty of a professional consultant was to give advice. This advice covered a wide range, and varied from suggestions on the proper placement of plants to pruning practices. The services of a professional consultant were usually obtained at an extra cost to the consumer.

The services of a professional consultant were provided by more firms than any other single service (Table VI). Ninety-five per cent of the firms in Group I and 85 per cent of the firms in Group II provided the services of a professional consultant. The percentage of firms in Groups III, IV, and V offering this service was considerably less. None of the thirty firms in Group III, 33 per cent of the firms in Group IV, and 4 per cent of the firms in Group V offered this service. The reason for more firms in Groups III, IV, and V not offering this service may be attributed to the fact that nursery products did not constitute a very large percentage of their total retail sales volume.

Landscape Planning

Drawing plans for the customer consisted of preparing a detailed sketch of a proposed landscape, usually for a home or business firm. The performance of this service was usually obtained at a cost above the normal cost of plants.

Only the firms in Groups I and II, where nursery products constituted a large percentage of their total retail sales volume, offered this service (Table VI). Ninety per cent of the firms in Group I and 78 per cent of the firms in Group II provided this service.

Landscape Service

The differentiation between the performance of landscape service and landscape planning was that the former performed the manual labor involved, while the latter did not. There was an extra charge for the performance of landscape service. Only those firms in Groups I and II, 92 per cent in Group I and 71 per cent in Group II performed landscape service (Table VI).

Delivery Service

Providing delivery service entails transporting the merchandise purchased by the customer to a location designated by him. There was usually no direct charge for delivery service on orders of five dollars or more. However, it may have been that this service was charged indirectly, since the groups in which a large percentage of the firms provided delivery service also had a higher mark-up.

Only firms in Groups I, II and IV provided any delivery service for nursery products. Seventy per cent of the firms in Group I, 85 per cent in Group II, and 33 per cent in Group IV provided this service (Table VI).

Garden Club Speakers and Meetings

Speaking at garden clubs was primarily a promotional device for the individual firm. The importance attached to this service, as indicated by the number of firms in each group providing it, can be related to the importance of nursery products in the composition of their total retail sales volume. Only those firms in Groups I and II, 42 per cent in Group I and 57 per cent in Group II, placed much emphasis on providing

this service (Table VI).

The furnishing of facilities for garden club meetings was done for the same reason as was the furnishing of speakers at garden clubs. However, this service was provided to a lesser degree than was that of providing a speaker. Only 25 per cent in Group I and 64 per cent in Group II provided this service. None of the firms in Groups III, IV, and V provided facilities for garden club meetings.

Other

The services under this category are relatively minor in importance if measured by the number of firms offering these particular services. Only two other services were mentioned by the retailers. They were the distribution of a news letter and bringing in special speakers and promoters for garden clubs. There were relatively few firms in any group that provided either of these services.

Replacement Policies

Replacement policies referred to action of correction taken by the firm when an item died within a certain period of time. This time period was usually established by the amount of time required by the plant to become firmly adapted to its transplanted habitat unless otherwise specified.

The findings revealed that among those firms who performed landscape service, a higher percentage had replacement policies on items planted by the firm than they did on cash-and-carry items.

Only in Groups III and V did more than 50 per cent of the firms

have a full guarantee on items sold on a cash-and-carry basis (Table VII). Relatively few of the firms in the other three groups had a full guarantee policy.

The second most often mentioned replacement policy was that of replacement at one-half price. A larger percentage of the firms in Group I, 20 per cent, used this replacement policy than did any other group. However, only 12 per cent of all firms in all groups used this type of replacement policy.

A few firms used policies other than the two mentioned above. These policies ranged from replacement at one-half price to a full guarantee, but had 30- to 60-day time limits attached to them. Forty-two per cent of the firms had no replacement policy on cash-and-carry sales.

Replacement policies on items planted by the firm applied only to Groups I and II, since they were the only groups that performed landscape service. The primary policy for both groups was that of full replacement (Table VIII). The second most important policy was that of replacement at one-half price. Only 17 per cent of the firms in Group I and 28 per cent of the firms in Group II reported no replacement policy on items that they planted.

TABLE VII

REPLACEMENT POLICIES ON CASH-AND-CARRY SALES BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Replacement Policy	Group I Nurseries and Landscape Firms	Group II Florists, Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Full Guarantee	5	3	20	2	19	49
One-half Price	8	2	4	1	-	15
Other	4	-	1	-	-	5
None	23	14	5	3	10	50
Total	40		30	6	29	119

[a]Department stores with garden center.

[b]Department stores without garden center.

TABLE VIII

REPLACEMENT POLICIES ON ITEMS PLANTED BY THE FIRM BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Replacement Policy	Group I Nurseries and Landscape Firms	Group II Florists, Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Full Guarantee	16	5	-	-	-	21
One-half Price	10	4	-	-	-	14
Other	7	1	-	-	-	8
None	7	4	-	-	-	11
Total	40	14	-	-	-	54

[a]Department stores with garden center.

[b]Department stores without garden center.

CHAPTER III

ADVERTISING OF NURSERY PRODUCTS AT THE RETAIL LEVEL

Advertising is a part of the marketing process. Its most distinctive function is to influence buyers.[1] The nature of advertising is determined by its purpose and by the dominant method employed. The primary purpose of advertising is to aid in making a profit for the person or persons who pay for it. Usually an attempt is made to differentiate the product through advertising. In some advertisements the dominant element is persuasion, in others stimulation, and in others assertion and iteration.[2]

Scope of Advertisement

Eighty per cent of all firms studied were doing some type of advertising (Table IX). In Groups II and V all firms advertised nursery products. Sixty-two per cent of the firms in Group I, 77 per cent in Group III, and 67 per cent in Group IV used advertising.

Joint advertising was considered to exist when a firm advertised in co-operation with another firm. This firm could be under different ownership but was most frequently a part of the same organization with which it jointly advertised.

Only in Groups III and IV did a majority of the firms employ joint advertising. This can probably be accounted for by the fact that a large

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[1] W. D. Moriarty, The Economics of Marketing and Advertising (New York: Harper and Brothers, 1923), p. 359.

[2] Ibid., p. 360.

TABLE IX

NUMBER OF RETAILERS BY CLASS, ADVERTISING NURSERY PRODUCTS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

	Group I		Group II		Group III		Group IV		Group V			
	Nurseries and Landscape Firms		Florists, Garden Centers, and Dept. Stores[a]		Drug, Variety, and Dept. Stores[b]		Hardware, Farm & Feed Stores		Grocery Stores		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Advertised Nursery Products	25	63	14	100	23	77	4	67	29	100	95	80
Did Not Advertise Nursery Products	15	37	-	-	7	23	2	33	-	-	24	20
Total	40	100	14	100	30	100	6	100	29	100	119	100

[a]Department stores with garden center.

[b]Department stores without garden center.

percentage of the firms in these two groups were members of large chains of firms and did their advertising in co-operation with the rest of the firms in the chain.

In the remaining three groups, a very small percentage, 8 per cent, of the firms employed joint advertising. This can probably be accounted for by the fact that very few firms in these groups were part of large chains.

The distinction between joint advertising and items advertised together was, in the case of joint advertising, two or more firms were involved. When considering items advertised together, only one firm was involved, and other commodities were advertised along with nursery products.

A large percentage of the firms in Groups II, III, and V, 71 per cent in Group II, 70 per cent in Group III, and 97 per cent in Group V, advertised nursery products in conjunction with other commodities. In Group IV, the number of firms advertising nursery products in conjunction with other commodities was equal to the number of firms advertising nursery products separately. All of the firms in Group I advertised nursery products as individual commodities.

Relative Importance of Different Advertising Media

There are certain definite advantages to newspaper advertising, among which are the following:[3]

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[3]Harry W. Harper, Effective Advertising (New York: McGraw-Hill Book Company, Inc., 1941), p. 246.

1. Newspapers reach all classes of people.

2. Many newspapers are published daily; therefore advertisements can be prepared and published more quickly than in some other media.

3. Newspapers allow selectivity of markets.

The newspaper was the most important advertising medium used by the retailers (Table X). This was true for each individual group as well as for the total of all firms studied. The percentage of firms using the newspaper as an advertising medium ranged from 47 per cent in Group I to 100 per cent in Group V. Seventy-one per cent of all firms studied advertised through the newspapers.

When all firms were considered, radio was the second most important medium. Twenty-five per cent of all firms studied used this medium. However, in Group I a very small percentage, less than 3 per cent, advertised by radio. In the remaining four groups, radio ranked second in importance as an advertising medium. The outstanding advantage of radio for advertising was that it enabled the advertiser to vitalize his message with the aid of sound.[4]

Closely following radio in importance as an advertising medium were television and the yellow pages of the telephone directory. Twenty-three per cent of all firms studied advertised through television. This medium was more important in Groups II, III, and V. None of the firms in Group IV and less than 3 per cent of the firms in Group I used television as a medium of advertising. The large expense involved may have been the reason why the firms in these two groups were reluctant to advertise by

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[4]Ibid., p. 275.

TABLE X

RELATIVE IMPORTANCE OF DIFFERENT ADVERTISING MEDIA BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

	Group I Nurseries and Landscape Firms		Group II Florists, Garden Centers, and Dept. Stores[a]		Group III Drug, Variety, and Dept. Stores[b]		Group IV Hardware, Farm & Feed Stores		Group V Grocery Stores		Total	
	Number and Per Cent of Firms Reporting											
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Newspaper	19	48	13	93	20	67	4	67	29	100	85	71
Radio	1	2	5	36	5	17	2	33	17	59	30	25
Television	1	2	4	29	5	17	-	-	17	59	27	23
Yellow Pages	15	38	5	36	4	13	-	-	1	3	25	21
Mailing Pieces	6	15	5	36	1	3	1	17	1	3	14	12
Magazines	6	15	1	7	-	-	1	17	-	-	8	7
Handbills	2	5	-	-	2	7	-	-	2	7	6	5
Other	5	12	3	21	3	10	-	-	3	10	14	12

[a]Department stores with garden center.

[b]Department stores without garden center.

television.

Twenty-one per cent of all firms studied advertised in the yellow pages of the telephone directory. This medium was more important in Groups I and II, where nursery products comprised a relatively large percentage of their total retail sales volume. Less than 8 per cent of the firms in the remaining three groups advertised through the yellow pages.

Mailing pieces, magazines, and handbills were relatively minor as media for advertising nursery products. Less than 12 per cent of all firms studied used mailing pieces, less than 7 per cent advertised through magazines, and only 5 per cent used handbills.

Displays

Open displays were those displays used by the retailers outside the structure which housed their business operations. In the case of nurseries, the display was usually a plot or field where the nursery products were being grown or heeled-in. The displays for the other types of firms usually consisted of balled plants, different kinds of fertilizer and seed, as well as some garden and lawn equipment. The open displays for all groups were located in front of or adjacent to the business establishment.

In Groups I, II, IV, and V, a relatively large percentage of the firms had open displays (Table XI). The widest range in size was found in Group I where the size ranged from 44 to 47,778 square yards. The reason for the upper limit being so large was that this was a production area adjacent to the business establishment which was also being used as

TABLE XI

TYPE AND AREA OF DISPLAY USED BY CLASS OF RETAILERS OF NURSERY PRODUCTS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Type of Display	Group I: Nurseries and Landscape Firms			Group II: Florists, Garden Centers, and Dept. Stores[a]			Group III: Drug, Variety and Dept. Stores[b]			Group IV: Hardware, Farm & Feed Stores			Group V: Grocery Stores		
	Number, Range, and Average of Firms Reporting														
	No.	Range Sq. Yd.	Av. Sq. Yd.	No.	Range Sq. Yd.	Av. Sq. Yd.	No.	Range Sq. Yd.	Av. Sq. Yd.	No.	Range Sq. Yd.	Av. Sq. Yd.	No.	Range Sq. Yd.	Av. Sq. Yd.
Open	38	44-47,778	8,241	13	6-3,333	780	9	2-100	10	5	1-28	13	27	2-333	48
Lath	17	11-4,778	856	6	111-1,100	422	-	-	-	-	-	-	-	-	-
Inside Building	3	278-2,222	967	-	-	-	24	1-5	2	2	1-3	2	10	1-4	2

[a]Department stores with garden center.

[b]Department stores without garden center.

a display area. The average display area for this group was 8,241 square yards. However, when two exceptionally large display areas were excluded the average became 5,910 square yards.

The range in the size of displays was considerably smaller in the remaining four groups. This was primarily because of the competition for display space by other commodities, as well as a lack of physical capacity. The smallest display area was found in Group IV where the range was from 1 to 28 square yards. The average area for this group was 13 square yards.

A lath house was usually built from small strips of wood or similar material. Its shape or form resembled that of a small shed in that its construction was upright with one or more sides open. The products on display were placed under the lath house in order to be in partial shade. The lath house was usually adjacent to the building housing the business operation.

Only 19 per cent of all firms studied made use of lath structures for their displays. The firms using lath houses were concentrated in Groups I and II, where 42 per cent of the firms in each Group used them. One possible explanation for the firms in Groups III, IV, and V not using lath houses was that, of those firms having the necessary space for outside display of nursery products, they chose to use other methods of outside display. This was usually found to be just placing the product outside the building with no props being used. Another important factor was that nursery products competed with other commodities for display space.

Displays inside the retail outlets usually ranged from simple counter displays to elaborate window displays. As might be expected,

these types of displays were found to be more prevalent in Groups III, IV, and V where the majority of all displays were found inside the building. The firms in these groups did not have the physical capacity for elaborate outside displays, thus they were forced to use inside displays.

Inside displays were most popular in Group III, where 80 per cent of the firms employed them. In Groups I and II, where nursery products comprised a relatively large percentage of their total sales volume, very few firms used inside displays.

Excluding the firms in Group I, where the display area was also used as the processing area during the rush season, a very small amount of space was devoted to inside displays. This may be explained by the fact that more profit per square yard could be obtained by displaying higher value, faster selling commodities.

CHAPTER IV

PRICING OF NURSERY PRODUCTS AT THE RETAIL LEVEL

In this chapter an examination was made of where retail prices were determined, the role of nursery products as loss leaders, and the credit practices used by the retailers of nursery products. Also, eleven nursery products were examined with respect to per cent mark-up to determine the differences and/or similarities among the five groups of retailers.

Source of Price Determination

As is the case with most industries, the retail price for nursery products was determined at different levels. This was due primarily to the type of ownership and management. When the retail outlet was owned and operated by the same individuals, the retail price was usually determined at the local level. Deviations from this pattern were found when the retail outlets were part of a chain. In this situation, the retail prices were determined primarily through a central agency. Control and accepted responsibility were two reasons for this pattern.

When the price was set by a central agency, control was the primary factor involved in determining where the price was set. Any organization large enough to employ central management also demands central control. There are both advantages and disadvantages to this method of price determination. On the positive side are the facts that central management usually has more formal education, it provides for

price uniformity among the different outlets, and it facilitates the record keeping of the organization. On the negative side is the fact that all outlets do not face the same competitive market situation. In such cases, the manager of the local outlet is more closely associated with his own market position, and is therefore in a better position to make decisions concerning price determination.

Assumed or delegated responsibility was a primary factor when prices were determined at the local level. The owners and managers of individual proprietorships or partnerships were in business because they felt that they could be successful. However, the fact remains that some of the managers had more ability with respect to price determination than did others. The primary advantage that local managers had was their close contact with the local market situation.

In Group I the prices for all firms were set by management at the local level (Table XII). This can probably be accounted for by the fact that these firms were not part of a chain, but were individual proprietorships or partnerships.

In Group II, where ownership was principally individual proprietorships and partnerships, 92 per cent of the firms determined prices at the local level. Even though there were some corporations in this group, they were small in size when compared with grocery store chains.

In Group IV, where the type of ownership was equally divided between corporation ownership and partnership, 83 per cent of the firms determined prices at the local level. Here again the firms that were incorporated were part of a small organization.

TABLE XII

LEVEL OF PRICE DETERMINATION BY CLASS OF RETAILERS OF NURSERY PRODUCTS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Level of Price Determination	Group I Nurseries and Landscape Firms	Group II Florists, Garden Centers, and Dept. Stores[a]	Group III Drug, Variety, and Dept. Stores[b]	Group IV Hardware, Farm & Feed Stores	Group V Grocery Stores	Total
	Number of Firms Reporting					
Local Level	40	13	12	5	1	71
Central Agency	-	1	18	1	28	48
Total	40	14	30	6	29	119

[a]Department stores with garden center.

[b]Department stores without garden center.

In Groups III and V, where the firms were primarily corporations, there was a distinct change to price determination by the central agency. In Group V, the central agency determined the prices for 60 per cent of the firms.

When considering all firms studied, price was determined at the local level more often than at the central agency. In 60 per cent of the firms the price was determined at the local level, and in the remaining 40, it was determined by a central agency.

Price List for Distribution

Compiling a price list for all products and distributing it among the potential customers was not a very common practice. Only 11 per cent of all firms studied distributed a price list, and these firms were not concentrated in any one group. However, those firms that distributed price lists had a larger sales volume than did the other firms of comparable type.

Credit

Credit can be and is evaluated from several points of view. The economist views credit largely as an instrument which makes possible a flow of goods in the modern world. The debtors view credit as purchasing power that, to a greater or lesser degree, they possess. It enables them to obtain the use of capital or goods owned by others.[1] Credit may be

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[1]Emil Troelson, Principles of Farm Finance (Saint Louis: Educational Publishers, Inc., 1951), p. 36.

viewed by the creditor in terms of confidence in ability to repay. An individual usually extends credit only to those in whom he has this confidence. The cost of merchant credit consists of: (1) interest on the value of the goods; (2) necessary accounting procedures; (3) expenses incurred in collection; and (4) losses from accounts which cannot be collected in full.[2]

More firms in which the sale of nursery products was of major importance extended credit than did those firms in which the sale of nursery products was not so important (Table XIII). Sixty-eight per cent of the firms in Group I and 93 per cent in Group II extended some type of credit.

There were reasons why credit was or was not extended by the firms in the different groups. Those firms that did extend credit sold primarily nursery products. Credit may have helped to attract the customers to their places of business. Once the customer attraction was accomplished, they had the opportunity of making a relatively large sale, and quite often had to extend credit to cover this large sale. If they refused credit to their customer, they stood the chance of losing him to a competitor. By extending credit, the retailer could be reasonably assured of the customer's return when he needed to make another credit purchase.

An entirely different situation prevailed among those firms where nursery products were not a major commodity, because the customer did not patronize the business establishment primarily to purchase nursery products. In those firms, nursery products were sold as impulse items and

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[2]Ibid., p. 203.

TABLE XIII

SCOPE OF CREDIT EXTENDED BY CLASS OF RETAILERS OF NURSERY PRODUCTS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Policy on Credit	Nurseries and Landscape Firms	Florists, Garden Centers, and Dept. Stores[a]	Drug, Variety, and Dept. Stores[b]	Hardware Farm & Feed Stores	Grocery Stores	Total
	Number of Firms Reporting					
Extended Credit	27	13	3	3	-	46
Did Not Extend Credit	13	1	27	3	29	73
Total	40	14	30	6	29	119

[a]Department stores with garden center.

[b]Department stores without garden center.

were usually sold in small lots.

In this situation, the customer was motivated to purchase at a particular store by factors other than credit on the type of nursery products offered. The entire line of merchandise carried by the store was considered by the customer before making his decision to shop at that particular store. Also important was the fact that the purchase of nursery products was usually small, thus not requiring credit.

Mark-up on Nursery Products

The per cent mark-up above wholesale cost was vitally important to the retailer because this was one of the major determinants of profit and loss. The mark-up had to be enough to offset expenses as well as yield a profit to the business.

It was found that those firms who depended primarily on the sale of nursery products for their receipts had a higher mark-up than did those firms where nursery products contributed only a small percentage to total retail sales.[3] The highest mark-up was in Group I, where it averaged 106 per cent (Table XIV). The second highest average mark-up, that of 84 per cent, was in Group II. Also important was the fact that the relative importance of nursery products in total sales volume was lower in this group. In Group I, nursery products contributed 86 per cent to the total sales. In Group II, this percentage was 57 per cent. This trend con-

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[3]The correlation between per cent mark-up and the per cent that nursery products contributed to total retail sales was: $r = .958$. The value of Z was 1.923. The standard error of Z was .50. The limiting values of r were .397 to .997.

TABLE XIV

MARK-UP AND VOLUME OF NURSERY PRODUCTS HANDLED BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Product	Group I: Nurseries and Landscape Firms		Group II: Florists, Garden Centers, and Dept. Stores[a]		Group III: Drug, Variety, and Dept. Stores[b]		Group IV: Hardware, Farm & Feed Stores		Group V: Grocery Stores	
	Per Cent Mark-up	Wholesale Volume (Thous. Doll.)	Per Cent Mark-up	Wholesale Volume (Thous. Doll.)	Per Cent Mark-up	Wholesale Volume (Thous. Doll.)	Per Cent Mark-up	Wholesale Volume (Thous. Doll.)	Per Cent Mark-up	Wholesale Volume (Thous. Doll.)
Deciduous Shrubs	98	47.4	96	18.8	40	1.8	47	4.1	36	8.4
Broadleaf Evergreens	93	182.3	87	82.1	30	.4	47	3.4	34	25.5
Needleleaf Evergreens	94	87.8	84	45.8	30	.3	60	2.6	35	8.9
Shade Trees	116	48.7	82	13.8	-	-	47	1.1	40	4.9
Ornamental Trees	109	33.8	82	10.9	-	-	47	.6	39	7.5
Nut Trees	131	7.6	78	2.5	-	-	-	-	39	.6
Fruit Trees	126	13.3	81	6.9	-	-	40	1.0	39	2.0
Vines	108	1.4	82	1.4	-	-	-	-	40	.1
Small Fruits	-	-	68	.7	-	-	40	.5	-	-
Perennials	160	5.2	76	2.9	-	-	40	1.5	40	.1
Roses	99	16.1	85	7.7	41	19.2	48	1.2	40	14.8
Total or Average	106	442.6	84	193.5	40	21.7	48	16.0	37	72.8

[a]Department stores with garden center.

[b]Department stores without garden center.

tinued with Group IV, the group with the next highest average mark-up. In this group, the mark-up was 48 per cent while the percentage that nursery products contributed to total retail sales volume was 6 per cent. In Group V, where nursery products contributed only slightly over one per cent to retail sales, the per cent mark-up was 37 per cent.

There were several factors that contributed to the higher mark-up in Groups I and II, but the amount of services rendered and the extension of credit were pertinent factors. These two factors were things that the customer had to pay for, and were reflected in the mark-up by the firms.

CHAPTER V

RECEIPTS FROM NURSERY PRODUCTS AND RELATED SALES

A computation of total receipts for selected products within an industry did not reveal how efficiently or inefficiently each individual firm was operating, but it did give some insight as to the importance of these products. To provide further information, the time of sale for eleven nursery products was studied.

Receipts

In Group I, the majority of receipts were from the sale of nursery products and the performance of landscape service (Table XV). The receipts from the sale of nursery products were close to $750,000. This was larger than for any of the other groups. As was expected, the firms in Group I were the leaders in doing landscape work. The firms in this group received $278,000 for landscape service. The firms in Group II were the only other ones that showed an income from landscape service. However, the income of $46,000 which they received for the performance of landscape service was relatively small when compared to that of the firms in Group I.

In Group II, the sale of nursery products accounted for a volume of $338,000. The receipts from related sales in this group amounted to $249,000. Groups I and II were the only groups in which the total receipts from the sale of nursery products amounted to over $100,000. However, the firms in Group V, grocery stores, did approach this figure.

TABLE XV

RECEIPTS FROM NURSERY PRODUCTS AND RELATED SALES, BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Source of Receipts	Group I Nurseries and Landscape Firms		Group II Florists, Garden Centers, and Dept. Stores[a]		Group III Drug, Variety, and Dept. Stores[b]		Group IV Hardware, Farm & Feed Stores		Group V Grocery Stores		Total	
	Dollar Volume and Percentage											
	Retail Volume (Thous. Doll.)	Per Cent of Total	Retail Volume (Thous. Doll.)	Per Cent of Total	Retail Volume (Thous. Doll.)	Per Cent of Total	Retail Volume (Thous. Doll.)	Per Cent of Total	Retail Volume (Thous. Doll.)	Per Cent of Total	Retail Volume (Thous. Doll.)	Per Cent of Total
Nursery Stock	745	36	338	16	31	1	23	1	97	4	1,234	58
Other Plants	22	1	64	3	59	3	10	1	19	1	174	9
Landscape Service	278	13	46	2	-	-	-	-	-	-	324	15
Related Sales	25	1	249	12	30	1	47	2	34	2	385	18
Total	1,070	51	697	33	120	5	80	4	150	7	2,117	100

[a]Department stores with garden center.

[b]Department stores without garden center.

In the four counties studied, the retailers had a retail volume of $1,234,000 from the sale of nursery products. Added to this was $174,000 from the sale of other plants, $324,000 for the performance of landscape service, and $385,000 from nursery related sales.

Time of Sale of Eleven Nursery Products

A larger percentage of each individual item studied was sold in the spring than in the fall (Table XVI). The percentage sold in the spring ranged from a minimum of 56 per cent of the fruit trees to a maximum of 92 per cent of the roses. When considering all eleven items, 64 per cent were sold in the spring and 36 per cent were sold in the fall. This meant that $789,592 were received from nursery products in the spring and $444,146 in the fall.

The explanation for the heavier sales in the spring was quite simple. This was the time of year when these products were most successfully planted.

TABLE XVI

TIME OF SALE OF ELEVEN NURSERY PRODUCTS BY CLASS OF RETAILERS IN KNOX, HAMILTON, DAVIDSON, AND SHELBY COUNTIES, TENNESSEE, 1958

Product	Group I Nurseries and Landscape Firms		Group II Florists, Garden Centers, and Dept. Stores[a]		Group III Drug, Variety, and Dept. Stores[b]		Group IV Hardware, Farm & Feed Stores		Group V Grocery Stores		Average	
	Per Cent Sold in:											
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Decidious Shrubs	63	37	70	30	99	1	59	41	96	4	69	31
Broadleaf Evergreens	56	44	58	42	100	-	56	44	93	7	60	40
Needleleaf Evergreens	56	44	62	38	100	-	62	38	89	11	60	40
Shade Trees	52	48	63	37	-	-	66	34	96	4	58	42
Ornamental Trees	61	39	69	31	-	-	65	35	96	4	67	33
Nut Trees	53	47	66	34	-	-	-	-	92	8	58	42
Fruit Trees	49	51	41	59	-	-	60	40	89	11	56	44
Vines	50	50	71	29	-	-	-	-	90	10	61	39
Small Fruits	-	-	68	32	-	-	60	40	-	-	64	36
Perennials	74	26	73	27	-	-	70	30	86	14	73	27
Roses	82	18	95	5	98	2	79	21	97	3	92	8

[a]Department stores with garden center.

[b]Department stores without garden center.

CHAPTER VI

STANDARDIZATION OF GRADES

In any exchange of goods, the buyer and seller must agree on how much of a commodity is to be delivered. As soon as trade gets beyond simple barter, a common language must be established. Price, in practically all markets, is a common denominator by which unlike details of size, amount, weight, and quality of products are expressed.[1]

Standard grades for nursery products are needed to perform a number of important functions. Among these are:

1. To maximize returns by better satisfying demand of buyers.
2. To facilitate sale by description.
3. To make price information more meaningful.
4. To aid in price determination.
5. To aid in eliminating an over-supply of low quality products from the market.[2]

If these functions are achieved, they will aid in establishing a more efficient marketing system.

Explanation of Functions

Each of these five functions will be analyzed to show their advantages and limitations. This may indicate where some of the practices

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[1]Merritt W. Baker, "Grades and Grading," Yearbook of Agriculture, 83D Congress, 2D Session, House Document No. 280, 1954, p. 142.

[2]Warren K. Trotter, Problems in Marketing Florists Crops, A. E. 983, Agricultural Experiment Station, Cornell University, 1955, p. 69.

discussed in this study may be improved.

Maximize Returns Through Satisfaction of Buyers

It has been said that "the right system of grades should maximize returns by classifying the product on the basis that most accurately reflects what the buyers want and are willing to pay."[3] There is a demand for all degrees of quality in nursery products. Some consumers want only the top quality products, others want low quality products, while still others demand products in between these two extremes. When a price differential exists, the number of purchases at these different levels of quality become evident.

By dividing his product into different grades on the basis of what the consumer prefers, the retailer puts himself in a better position to satisfy the demands of each of these classes of buyers.[4] He will be able to maximize his returns because he will be able to obtain a premium for the higher quality products.

By grading his products, the retailer is differentiating them. It is true that he is not differentiating them from those offered by his competitors, but since he has his own products differentiated, he has a better basis for offering a wide range of prices. This would tend to satisfy a larger number of customers.

Once standard grades are established, the importance of competition between firms will be accentuated. The retail firms will have to rely on

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[3]Fredrick V. Waugh, Readings on Agricultural Marketing (Ames: The Iowa State College Press, 1954), p. 306.

[4]Trotter, op. cit., p. 69.

advertising, promotion, price differentials, and aggressive management. Many retailers may oppose standardization because they will be losing a way to differentiate their products from those offered by their competitors. In the present situation, where no standard grades exist, the retailers can use the "better quality angle" in promoting and pricing their products.

Facilitate Sale by Description

Descriptive terms that have a real and specific meaning would be a great help to the retailers of nursery products. They would help both the buyer and seller. By having such terms, the problem of communication between the retailer and consumer as well as between the retailer and wholesaler would be greatly simplified.

Many times the consumer telephones the retailer before visiting the place of business to make a purchase. This is particularly true concerning items that are going to be used for home and business landscaping. Quite often the consumer's knowledge about these items is limited. If standards did exist, the explanation of the type and quality of items available would be easier for the retailer.

Lack of quality grades increases the risk in buying without inspection.[5] There is a possibility that this increase in risk may be reflected in higher prices. If this is true, standard grades would reduce the risk involved by reducing losses caused by an oversupply of low quality products. This could result in lower prices to the consumer.

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[5] Loc. cit.

Make Price Information More Meaningful

Price information is of limited value unless it is accompanied by accurate information concerning quality. It has been said that "price offers the nexus through which qualities, quantities, or other attributes of goods are finally measured when they are bought or sold."[6]

It means very little to compare prices when the prices being compared are not for comparable quality merchandise. One must have a "benchmark." Grades will supply this "benchmark."

Prices of different qualities are needed to determine market preferences.[7] When we have a "benchmark" for comparing prices, we will be able to answer the question of what price consumers are willing to pay for different quality products.

Aid in Price Determination

The price determining process may be divided into two parts.[8] First is determining the general level of price. The second part is the determining the price for a particular lot of nursery products.

The first part of the price determining process is usually controlled by the supply and demand situation, as well as the amount of control the retailer is able to exert over the industry.

With a system of grades, the second part of the price determining

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[6]Edward E. Gallahue, "Grades and Grading," Yearbook of Agriculture, 83D Congress, 2D Session, House Document No. 280, 1954, p. 142.

[7]Trotter, op. cit., p. 69.

[8]Ibid., pp. 76-77.

process becomes more easily performed. When grades exist, the basis of customer-retailer bargaining on price becomes much narrower, and the price determining process becomes essentially one of determining the general price level for the day.[9]

This method of price determination should also result in a lower sales cost for the retailer. The selling of nursery products at the retail level is a time consuming process because of the small lots in which they are sold. Haggling over price is one of these time consuming elements. By reducing the time required to make a sale, the retailer will be able to reduce his cost.

This method of price determination is not favored by all retailers. Even though standardization facilitates the procedure of price setting, the fact remains that it reduces the amount of price control that the individual firm can maintain. If standard grades did exist, each retailer would have to confine his prices to a range that was close to those of his competitors. Without grades, he does not have to do this because it is difficult to compare his prices with those of his competitors since there are no predetermined measures of differences in quality.

Eliminating an Over-supply of Low Quality from Market

During periods of high production, many low quality products reach the retail level. Many times these low quality products cannot be sold and have to be charged as losses by the retailers.

This situation could be alleviated through the proper use of grades. The retailers could purchase only the qualities that could be

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[9]Ibid., p. 77.

sold. This would eliminate excessive losses by the retailers.

Standardization will affect the practices now being employed by some producers. In the future, there will still be a demand for some low quality products, but this demand may not be equal to the supply. If this situation should exist, the producers would have to change some of their cultural practices in order to produce higher quality products. Because of this, producers may strongly resist standardization.

Application of Standardization to This Study

The findings of this study indicate that standardization of grades would be beneficial to the retailers in making their purchases. A large number of the firms where nursery products comprised a relatively large percentage of total retail sales volume purchased on an inspection basis. It may be that this was not due to choice. Since these firms apparently wanted to sell high quality products, they had to inspect the products before purchase. Equally important was the fact that the firms who purchased on a descriptive basis lost a higher percentage of their stock than did those firms who inspected the products before purchase. Apparently these losses were the result of low quality products. If these retailers could purchase on a standardized grade basis, these losses would be greatly reduced.

Grades could also put replacement policies on a more stable basis. There was a wide variety of replacement policies used by the retailers. It is questionable whether these policies were based on the quality of the product being sold. If these policies could be based on the quality

of the product, the customer could become better informed on what replacement policies are costing him. If two retailers sold the same grade product, the differential in price could be charged to the replacement cost. The customer could easily determine how much this "insurance" was costing him.

It would be possible for the retailer to set up a very definite replacement policy on each grade. In this situation, the customer would have some choice in selecting the type of replacement policy that he desired. It would also give the customer the opportunity of comparing the replacement policies of each individual firm. Grades would provide the "benchmark" on which he could base his comparison. Without grades, the customers with a limited knowledge about nursery products could not make a thorough and complete comparison because of the differences in quality.

Any extra cost absorbed by the customer for services rendered by the firms would also become evident. This of course puts the retailing of nursery products on a very competitive basis. The retailers who are efficient in their marketing will benefit, and those who are not efficient may be hurt or eliminated.

Those advantages pointed out with reference to price determination will apply to the retailers included in this study. Knowledge of price will be more accessible, and this will alleviate some of the problems faced by those firms where price is determined at the local level. It will also provide central management of chain stores with more working tools with which to determine price.

Problems in Establishing Grades

There are many problems involved in setting standards for nursery products, and many have expressed the opinion that these problems are insurmountable. The problems appear at all levels, from the producer to the retailer.

Nursery products are produced under a wide range of climatic and cultural environments. It is claimed that specifications set up to suit the characteristics of nursery products produced in one area tend to discriminate against those produced in another area.[10] There is the alternative of developing a different set of standards for each producing area. However, this would probably result in confusion, with the advantages of standardization being lost.

Quality has been defined as the "combination of attributes of a product that has significance in determining the degree of acceptability of the product to users."[11] Determining the measures of quality that will be used poses a major obstacle to the establishment of standard grades.

The attitude of many of the people in the industry toward standardization of grades has been negative. Some of the attitudes expressed are that the price will be adversely affected by grade labels, that they can obtain a higher price for their low quality products by mixing them

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[10] Ibid., p. 78.

[11] Wilbur A. Gould, et al., "Quality, Its Measurement and Application, Market Demand and Product Quality," Report of the Marketing Research Workshop, Michigan State College, June 1951, p. 117.

with better quality products, that the additional cost incurred in grading will not be offset by benefits gained from grades, and that standardized grades will lead to federal regulation.[12] Of primary importance is the question of whether the United States Department of Agriculture or the industry should set and maintain standards, if and when they are established. Even those people in the industry who support standardization are divided on this question.[13]

One of the primary questions involved is flexibility. If the industry sets and maintains standards, enough flexibility can be incorporated to meet changes. The amount of time required to make changes in grades is vitally important. The industry can act more quickly on this matter than can a federal agency.

The government agencies, in many cases, already have equipment and trained technicians available to carry on research preceding establishment of standard grades and to carry on the inspection necessary to maintain them.[14] However, there are some good reasons why federal grade standards are opposed. The trade may consider them impracticable, competitors may take advantage of the retailer who uses official grades by adopting lower standards, or official grades may not be representative of quality differences actually important to the trade or suitable for use until they are revised.[15]

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[12]Trotter, op. cit., pp. 80-81.

[13]Ibid., p. 83.

[14]Jessie V. Coles, Standardization of Consumer's Goods (New York: The Roland Press Company, 1932), p. 168.

[15]Frederick Lundy Thomsen, Agricultural Marketing (New York: McGraw-Hill Book Company, Inc., 1951), p. 270.

Some of the people in the industry have an aversion to federal grades because they feel that it might lead to mandatory compliance. It is true that the federal government has set and regulated grades for some products. This situation has usually evolved because of abuses in the marketing process.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Even though nursery products are increasing in importance in Tennessee, information concerning the practices and facilities of the retailers of these products is quite limited. Census reports leave a wide gap in this area. In general, this study has been concerned with filling this gap by presenting facts and figures that describe the retailing of nursery products in Tennessee.

Data used in this study were collected by personal interviews with retailers of nursery products in Knox, Hamilton, Davidson, and Shelby Counties of Tennessee. One-hundred nineteen schedules were obtained from the 182 retailers licensed to sell nursery products in these counties. For descriptive purposes, these retailers were classified into five groups on the basis of type of operation. Group I consisted of nurseries and landscape firms. Group II was florists, garden centers, and department stores with garden centers. Group III was drug stores, variety stores, and department stores without garden centers. Group IV was hardware, farm, and feed stores. Group V was composed entirely of grocery stores.

The nursery was the direct source of supply of nursery stock for all groups except grocery stores. With them, the stock was obtained from nurseries by a central purchasing agent and distributed to the individual stores. Only 7 per cent of the firms studied used an oral or written contract when purchasing nursery products.

Only in Groups I and II did a very large percentage of the firms purchase on an inspection basis. In the other three groups, less than 20

per cent of the firms inspected the stock before purchase. The majority of all firms studied purchased on a descriptive basis.

Common carriers and private carriers were of equal importance as methods of transporting nursery products to the retail establishment. The common carrier was used by 77 per cent of the firms in Group I. The private carrier was used most often by the firms in Group III, where 72 per cent used this method of stock transportation. In only 20 per cent of all firms studied did the supplier furnish the transportation for moving the stock to the retailer.

The firms in Groups I and II offered more services than did those firms in the other groups. There was a direct charge for some of these services, such as drawing plans, landscaping, and providing the service of a professional consultant. That there was an indirect charge for the other services was indicated by the fact that those firms who provided the most services also had a higher mark-up. This resulted in a higher price to the consumer.

Fifty-eight per cent of the firms had some kind of replacement policy on nursery products sold on a cash and carry basis, and 48 per cent had replacement policies on items that they planted. The full guarantee was the most common policy, with replacement at one-half cost ranking second.

Eighty per cent of all firms studied were using some type of advertising. This percentage ranged from 62 per cent in Group I to 100 per cent in Groups II and V. Thirty-eight per cent of all firms used joint advertising, and 50 per cent advertised nursery products in conjunction with other items. However, all the firms in Group I, where nursery prod-

ucts were the major item sold, advertised them as individual commodities.

Newspaper advertising, which 71 per cent of all firms used, was the most important kind. Other major media, listed according to importance, were radio, television, yellow pages of the telephone directory, and mailing pieces.

The most widely used type of display was that of open display adjacent to the business establishment. The size of open displays ranged from 1 to 47,778 square yards. The lower end of the range was small because of limited space and competition by other commodities. The upper end of the range was a production area which was also being used as a display area.

When the ownership was an individual proprietorship, a partnership, or a small chain, the price was usually determined at the local level. When the outlet was part of a large chain, the price was usually determined by a central agency.

The data revealed that there was a direct relationship between the per cent that nursery products contributed to total retail sales and per cent mark-up. The highest average mark-up, 106 per cent, was in Group I. In this group nursery products comprised 87 per cent of the total retail sales volume. The lowest mark-up, 37 per cent, was in Group V where nursery products contributed slightly over 1 per cent to total retail sales.

The total receipts of the firms in this study from nursery products and related sales in 1958 were $2,117,000. The firms in Group I accounted for $1,070,000 or 51 per cent of this total. The firms in Group II ac-

counted for $697,000 or 33 per cent. A breakdown of the total sales of all groups by type of sale revealed that nursery stock accounted for 58 per cent of the volume, other plants 9 per cent, landscape service 15 per cent, and related sales 18 per cent.

Future Indications

Nursery products are being sold without being graded. There has been some controversy in the trade as to the possibility of creating standardized grades. It is felt by the author that standardized grades will aid in the creation of a more efficient marketing system. There are many major obstacles that must be overcome before grades can be established, but with resourceful thinking and hard work, these obstacles can be overcome.

Supermarkets may play a greater role in the retailing of nursery products in the future. More and more supermarkets are adding nursery products and gardening materials to their lines of merchandise. They have the advantage of a steady stream of customers in and out of their stores, saving the customers a special trip to a special store to purchase nursery products. The supermarkets are also offering lower priced products than are the retailers who specialize in nursery and related products. If standardized grades are achieved, it is probable that supermarkets will put a price squeeze on the other retailers, because they are willing to sell at a lower mark-up than the other groups interviewed.

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APPENDIX

Confidential

County_____ Schedule No._____
Date_____

University of Tennessee
Agricultural Experiment Station
Department of Agricultural Economics and Rural Sociology

Name of Firm_____

Address_____

I. Respondent: Owner ☐ Manager ☐ Owner & manager ☐ Other_____

II. Type of Ownership: Corporation ☐ Partnership ☐ Individual proprietorship ☐

III. Classification:

Garden center ☐ Five and ten cent store ☐ Grocery store ☐
Landscape firm ☐ Nursery ☐ Florist ☐ Department store ☐
Feed store ☐ Hardware store ☐ Other (name)_____

IV. Display: (type, area and location)

☐ Open (outside of building)
Area (sq. ft.)_____
Location (relation to main bldg.)_____
☐ Lath
Area (sq. ft.)_____
Location (relation to main bldg.)_____
☐ Inside building
Area (sq. ft.)_____
Location (where in bldg.)(relation to other commodities)_____

☐ Other (name)_____
Area (sq. ft.)_____
Location (relation to main bldg.)_____

V. Procurement Practices:

Stock procured from: Central agency ☐ Nursery ☐ Wholesale establishment ☐ Other (name)_____

Do you have? Written contract ☐ Oral contract ☐ No contract ☐

Do you buy by: Inspection ☐ By description (sight unseen) ☐

VI. Stock transported by:

Common carrier ☐ Own firm ☐ Supplier ☐

VII. Services rendered by this firm:

- ☐ Professional consultant
- ☐ Draw plans for customer
- ☐ Perform landscape service
  - Max. distance_____
  - Min. order (dollars)_____
  - Months (name)_____
- ☐ News letter
- ☐ Speak to garden clubs, etc.
- ☐ Furnish facilities for garden club meetings
- ☐ Bring in special speakers and promoters
- ☐ Delivery
  - Max. distance_____
  - Min. order (dollars)_____
  - Months (name)_____
- ☐ Other (name)_____

VIII.

Type	Displayed			Origin		Healed-In				Percent of plants sold in fall	Percent of Plants sold in spring	Percent markup (percent)	Percent of stock lost		Wholesale value of plants purchased (dollars)
	Balled	Canned	Bare root	Central Agency	State	Sawdust	Dirt	None	Other				In stock	At consumer level	
Decidious shrubs															
Broadleaf evergreen shrubs															
Needleleaf evergreen shrubs															
Shade trees															
Ornamental trees															
Nut trees															
Fruit trees															
Vines															
Small fruit															
Roses															
Perennial															

IX. Credit:

Credit given: Yes ☐ No ☐
If yes, by whom
Own firm ☐ Other (name)_____

X. Pricing practices:

Price list for distribution: Yes ☐ No ☐
Where is price determined: Local level ☐ Central agency ☐
Is nursery stock ever used as a loss leader? Yes ☐ No ☐

XI. Advertising:

Do you do joint advertising? Yes ☐ No ☐
If yes, with own organization ☐ Other (name)_____
☐ Nursery advertising carried with other items.
☐ Nursery advertising done separately.
Relative importance of methods used (rate 1, 2, 3, 4, etc.)

____ newspaper	____ yellow pages
____ radio	____ hand bills
____ TV	____ mailing pieces
____ magazines	____ specialties (match cover, pencils)
	____ others (name)_____

XII. Replacement policies or guarantees:

A. What are the replacement policies followed by your supplier?

_____

B. What are your replacement policies for:

Cash and carry sales
None ☐ 100% guarantee ☐ 1/2 price ☐ Other (name)_____

Items set by firm
None ☐ 100% guarantee ☐ 1/2 price ☐ Other (name)_____

XIII. Receipts from retail sales and services:

Receipts from nursery and nursery related sales $_____.
This is what percent of entire business. _____
Nursery stock $_____ (not landscape work)
Other plants (name) $_____ _____
Landscape services $_____
Plants $_____
Service $_____
Fertilizer, tools, insecticides, etc. $_____

Are there any urgent marketing problems faced by your firm which need immediate attention? (Name)_____

_____