



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Shelf Space Allocation in the Produce Department: Implications for Marketing Specialty Produce

by

Bobby G. Beamer
Former Graduate Research Assistant
Department of Agricultural Economics
Virginia Polytechnic Institute and State University

Warren P. Preston
Assistant Professor
Department of Agricultural Economics
Virginia Polytechnic Institute and State University

Abstract

In recent years, fresh fruits and vegetables have attracted attention as potential alternative agricultural enterprises. The produce section also has grown in importance in the supermarket industry. Yet, there is little known about the produce shelf space allocation process within supermarket chains.

This research describes the organization of fresh produce marketing within retail supermarket chains. Implications are derived for market penetration by new produce suppliers, particularly growers of specialty produce items. Results are reported from personal interviews conducted with the person most responsible for produce merchandising within each of 17 supermarket chains operating in the Virginia area.

Introduction

As farm incomes from traditional enterprises waned during the 1980s, producers in many states looked toward production of fresh fruits and vegetables as an alternative agricultural enterprise. A number of economic studies were spawned by the growing interest in these items to replace, supplement or diversify existing farm enterprises. Recent research on fruits and vegetables as alternative crops has focused on individual farm production (Zwingli, Hardy and Adrian), regional production (Epperson and Lei), production and marketing systems (Runyan *et al.*), marketing channels (Henneberry and Willoughby), market windows (Stegelin, Williamson and Riggins), consumer demand (Eastwood, Brooker and Orr), and export demand (Lopez, Pagoulatos and Polopolus).

The widening attention given to fresh fruits and vegetables as a production alternative has been paralleled by rising consumer demand for

these items (Capps). Consequently, the fresh produce department is now threatening the meat department as the most important section of the store. Produce sales were second only to fresh red meat in the area of perishables during 1988 ("Produce," p. 43). Produce departments have grown from 7.6 percent of total store volume in 1970 to nearly 9 percent in 1988, and average gross profit margins have grown from 28 percent in the early 1960s to 32.4 percent in 1986 (Linsen, p. 131). Annual produce sales have increased by almost one billion dollars every year since 1984, when sales were \$23.1 billion, to 1988, when sales were \$26.8 billion.

As the produce section has grown in importance, retail supermarkets have attempted to attract more business by offering expanded produce lines. Large stores may stock as many as 300 to 400 produce items, compared to 50 to 100 items ten years ago (Linsen, p. 131). In addition to the requisite staple items, most supermarkets now offer a range of low-volume, specialty items to cultivate an image of variety and completeness in the produce department. The specialty section may be six feet of shelf space set aside specifically for testing new items, or it may be an integrated part of an expansive produce department where several varieties of lettuce are displayed only a few feet away from star fruit and locally processed private-label apple cider.

How do such diverse items from different sources find their way to the produce section of the local supermarket? McLaughlin concluded that control over produce shelf space lies almost entirely with the retailer, whose "strength can rarely be compromised by strategic counter moves of produce suppliers" (p. 422). Thus, produce suppliers must understand and operate within the framework established by retailers.

Little is known, however, about management and decision making processes relevant to produce marketing within retail supermarket chains. More generally, research into the structure of food industries has "treated the firm as a black box" connecting market structure with performance (Rogers and Caswell). Such research sheds little light on the decision making process that determines which fresh produce items will

receive shelf space in the retail market, and provides no insight for producers wishing to enter the market. An improved understanding of supermarket produce merchandising strategies will facilitate the formation of better producer-retailer relationships, which are essential in the fresh produce industry.

Research Objectives

The purpose of this research is to describe the organization of fresh produce marketing within retail supermarket chains and to assess opportunities for marketing fresh specialty vegetables within the confines of such arrangements. Specific objectives are:

1. to describe intra-firm merchandising strategies that shape produce procurement practices, and
2. to derive from these strategies implications for market penetration by new produce suppliers, particularly growers of specialty produce items.

The research focuses on a case study of supermarket chains operating in the Virginia region. Although a different sample likely would yield different specific outcomes, general results and implications drawn from the sample are presumed to be widely applicable.

Specialty Produce Items as Alternative Crops

Produce items may be classified by sales volume along a spectrum from specialty to staple products. Staple items are high-volume standard produce items that play a major role in the American diet. Staple items include apples, bananas, broccoli, cabbage, celery, grapefruit, variety greens, iceberg lettuce, mushrooms, oranges, yellow onions, potatoes, and tomatoes. Specialty items, on the other hand, are sold in smaller volumes and may be more market specific. What is a specialty in one area could be a staple in another depending on the clientele. Because of the market-specific nature of specialty items, a strict definition is difficult to establish. Specialty items are generally carried in lower volumes, may be relatively new within a given

market area, and are provided to convey an image of variety and completeness to the produce section.

With the escalating emphasis on variety in the produce section, new producers might find production opportunities in the specialty item category. New producers may more easily penetrate the specialty produce market than the market for staple produce items for several reasons. Compared to staple items, specialty items are usually required in smaller volumes by retailers. Thus, small, local producers or producer groups should be able to meet retailers' quantity requirements. Retailers may not view year-round availability of specialty items as necessary and so may be more willing to stock items only when available locally. Because many specialty items are new, established marketing relationships may not have developed. Also, some retailers might appreciate the positive image that could be promoted by carrying locally grown produce. This research explores these possibilities.

Research Procedures

The modern retail supermarket industry is a competitive business. Hence, management personnel are reluctant to reveal firm strategies and operations to an unfamiliar researcher from outside the firm. To overcome such anticipated recalcitrance, personal interviews were chosen as the appropriate vehicle for data collection. Moreover, the objectives defined for the research suggested the need for an interactive dialogue between the firm representative and the researcher, which is best achieved through a personal interview. Personal interviews allow for the development of relationships that facilitate discussion of sensitive issues, and provide the interviewer with the opportunity to pursue unanticipated subjects relative to the research problem (Dean, Eichhorn and Dean).

To lend consistency to the interviews, a general interview protocol was developed. Interviews began with inquiries about the management structure of the firm. Next, the interview focused on the movement of produce through firm facilities to the produce department in individual stores. Respondents were asked to describe the require-

ments for both warehouse and direct store delivery of fresh produce, as well as ordering and shipping procedures between the warehouse and the stores. Descriptions of merchandising practices were elicited with special attention paid to methods of allocating shelf space. The only written part of the interview was the completion of check-off lists of specialty fruits and vegetables offered by the firm. Completion of these lists was followed by a discussion of experiences with the items. The interview was designed to last no longer than 45 to 50 minutes to maximize participation.

Sample Selection

Virginia fruit and vegetable growers maintain a geographic marketing advantage with regard to their close proximity to the large population centers around Washington, D.C., Richmond and Norfolk. While direct marketing to consumers is a feasible option for some producers, commercial production of fresh fruits and vegetables typically requires commercial outlets provided by retail supermarkets. In the metropolitan statistical areas (MSAs) within the region of the study, single unit supermarkets rarely accounted for more than 5 percent of total market share (*Chain Store Guide*). Therefore, only multiple unit supermarket chains were included in the sample.

The *Chain Store Guide -- 1990 Directory of Supermarket, Grocery and Convenience Store Chains* served as a source for identifying potential participants in the study. An attempt was made to include all chains operating within Virginia's major metropolitan areas, as well as a number of chains operating in other regions of the state. Selection of face-to-face interviews as the method of data collection imposed time and budgetary constraints limiting the sample size. Therefore, the firms included in this study constitute a selective rather than random sample. An attempt was made to capture as much of the market share as possible within the region of interest, while including chains of varying size, location, management style, and organization.

Table 1**Characteristics of Supermarket Chains in Survey Sample**

Chain	Headquarters	No. of Stores	Areas of Operation
Acme Markets of Tazewell, Va.	North Tazewell, VA	8	VA, WV
Camellia Food Stores Co-op	Norfolk, VA	62	VA
Deskings Super Markets, Inc.	North Tazewell, VA	7	VA, WV
Driver Corporation	Harrisonburg, VA	3	VA
Farm Fresh	Norfolk, VA	64	NC, VA
Food Fair of N.C. Inc.	Winston-Salem, NC	9	NC
Food Lion, Inc.	Salisbury, NC	601	DE, FL, GA, MD, NC, SC, TN, VA
Giant Food Inc.	Landover, MD	145	DC, MD, VA
Harris-Teeter, Inc.	Charlotte, NC	128	NC, SC, TN, VA
The Kroger Co.	Roanoke, VA	116	KY, NC, OH, TN, VA, WV
Lowe's Food Stores, Inc.	Winston-Salem, NC	110	NC, TN, VA
Magruder, Inc.	Rockville, MD	13	MD, VA
Safeway Stores, Inc.	Landover, MD	154	DC, MD, VA
Wade's Foods, Inc.	Christiansburg, VA	6	VA
Wayne's Supermarkets	Charlotte, NC	6	NC
Winn-Dixie Charlotte	Charlotte, NC	107	NC, SC, TN
Ukrop's Super Markets, Inc.	Richmond, VA	19	VA

SOURCE: *Chain Store Guide -- 1990 Directory of Supermarket, Grocery, and Convenience Store Chains.*

An initial list of 25 chains was prepared as potential participants. Of these, five were eliminated from the sample due to scheduling constraints. The initial contact person within each firm was determined from the *Chain Store Guide* or by a telephone call to the public relations department of the firm. Because the produce merchandiser or director would be most familiar with all positions and operations associated with produce marketing, an attempt was made to identify and contact the person in this position within each firm. Each contact person received a letter requesting an interview and a description of the research project. Within a week of receiving the letter, the person was contacted by telephone so that any questions or concerns on the part of the firm could be addressed. Next, an appointment with the produce merchandiser or a representative was arranged. Of the 20 chains contacted, one had been acquired by another chain in the sample, one was unable to arrange a meeting time, and one declined to participate. As a result, 17 interviews were conducted with industry personnel between April 26 and May 31, 1990. The 17 people interviewed included two vice presidents, seven directors of produce, five produce merchandisers, and three produce merchandisers with other responsibilities within the firm.

Sample Characteristics

The 17 chains in the sample represented over 1,500 stores operating in 15 states and the District of Columbia (Table 1). For purposes of classification, chains operating less than ten stores are referred to as small, chains operating 100 or more stores are referred to as large, and those in between are referred to as medium in size. Six of the chains in the sample (35%) operated ten or fewer stores each, accounting for 2.5 percent of the total stores. In the United States, about 84 percent of supermarket chains operate fewer than ten stores, accounting for only 20 percent of total store numbers. Nine chains in the sample (53%) operated more than fifty stores each, accounting for about 95 percent of the total stores within the sample.

Although market shares cannot be computed for the entire study region, market shares can be calculated for five MSAs within the study region

(Table 2). Chains included in the study controlled between 50 and 85 percent of the stores and accounted for 67 to 90 percent of the total sales within these five MSAs. If similar numbers applied to the nonmetropolitan areas, the sample represented most of the market share within the region of interest.

Table 2

Market Shares Held by Supermarket Chains in Survey Sample, Selected Metropolitan Statistical Areas

<u>Metropolitan Statistical Area</u>	<u>Percent of Stores</u>	<u>Percent of Sales</u>
Richmond-Petersburg, VA	50	67
Charlotte-Gastonia-Rock Hill, NC-SC	69	72
Norfolk-Virginia Beach- Newport News, VA	82	82
Washington, DC-MD-VA	71	83
Greensboro-Winston-Salem- High Point, NC	85	90

SOURCE: *Chain Store Guide -- 1990 Directory of Supermarket, Grocery, and Convenience Store Chains.*

Strategies Affecting the Produce Department

Various firm strategies influence the produce assortment available to consumers. Firm image, while not specific to the produce department, holds important implications for produce merchandising. Although quality and supply of produce lie beyond a supermarket chain's complete control, firms employ strategies to improve consistency and availability of produce. Finally,

merchandising strategies culminate in individual produce departments with the allocation of shelf space.

Firm Image

Most supermarket chains try to project the image that their stores offer the best quality as well as the best prices. These characteristics, however, may be mutually incompatible. Thus, most retail supermarket chains, after stripping away the commercial rhetoric, have chosen an image that is reflected in their marketing activities.

Two major categories of supermarket image are "full service" versus "price conscious." Full service chains attempt to project an image of variety and completeness to the consumer by touting extensive product lines, high quality standards, and special customer service. Produce merchandisers for such firms insisted that they buy only the highest grades regardless of price. Price conscious chains extol low prices and frequently offer generic products, limited variety, and limited customer services. These firms tend to carry fewer specialty items than the other chains. While attempting to offer variety and quality, they often compromise to keep prices low.

Merchandisers for five firms in the interview sample explicitly stated that the chains operate full service supermarkets selling only the highest quality produce. Merchandisers for these firms stressed the importance of quality characteristics above all else when selecting produce. One merchandiser indicated that an average of 10 percent of all produce delivered to their warehouse is rejected because it does not meet company standards. Another merchandiser stated that his firm purchases only the top U.S. grade standards and does without rather than sell lower quality. Other traits of the full service supermarket image are variety and completeness. From a list of 83 specialty fruits and vegetables, each merchandiser was asked to check off the items that the chain carried in the past year. The average for all 17 firms was about 44 items. The average number of specialty items from the five full service chains was over 67, while the average

for all other chains was fewer than 33 items. "We carry everything" was the typical attitude of the merchandiser for the full service chains.

At least three of the other 12 chains compete for a share of the full service market in at least some of their stores. Only one interviewee specifically claimed to have a "meat-and-potatoes" type market. The other eight chains fall somewhere between the full service and strictly price conscious extremes. These firms tend to carry only the most popular specialty items. They offer different varieties and high grades of produce, but only when it can be obtained at a "reasonable" price. Determination of the trade-offs between price and quality is the responsibility of the produce director or merchandiser.

Another factor closely related to firm image is that of uniformity among stores. Different chains allow for different amounts of variation from one store to the next. Most interviewees indicated a desire for uniformity among all stores within the chain. Usually this is achieved through a marketing plan or departmental layout developed in the upper management levels. Such plans allow individual stores varying levels of flexibility. The greatest amount of uniformity occurs among the full service chains. While some freedom might be allowed with respect to total volume of an item carried, merchandisers at most full service firms said that "if one store carries it, all stores do." Part of the full service image is the ability of the consumer to find the same items in the same location in any of the chain's stores. Another factor influencing uniformity is the geographical area over which the chain operates. Chains operating over diverse geographical areas may experience difficulty meeting local consumers' needs while maintaining strict uniformity. On the other hand, the merchandiser for one of the medium-sized chains pointed out that all of their stores are located within a 15 mile radius, and so while flexibility is allowed, little is needed.

Produce Quality and Supply

Of the many factors that influence the success of a produce department, quality is probably the most important (Imming, McLaughlin). When discussing sources of produce, all merchandisers

in the study stressed the importance of consistent quality. The quality concerns of merchandisers were not limited to the size and maturity of the product in question, but also included proper grading and length of shelf life. Most merchandisers, especially those with large firms, expressed concern over the ability of local producers to meet their quality requirements in these respects. Merchandisers felt that small, local producers do an inadequate job of grading their product. Merchandisers emphasized the need for boxes packed with only one size of produce.

Almost everyone interviewed also stressed the need for pre-cooling of produce to remove field heat. Because fresh fruits and vegetables continue to respire after harvest, the sooner that the temperature of the produce is reduced and held at the lowest safe temperature, the longer the expected shelf life (Nonnecke). While local producers may be able to supply a fresher product to retailers, if the field heat has not been properly removed and the product has not been shipped under refrigerated conditions, then the local produce may have a shorter shelf life than a similar product shipped from across the country. Respondents felt that local producers are either unable or unwilling to adopt the technology necessary to perform this vital function.

Seasonality is another important factor influencing which items are found in the produce department at any given time of year. Most retailers indicated that their produce racks were changed four to six times per year because of seasonal variation in the availability of items. Because of improved handling and transportation techniques, the availability of most staple items has been extended to almost a year-round basis for most parts of the United States. Some items, however, are still available only during certain times of the year, and the season can have a large influence on the price and quality of available items. Hence, local producers might find opportunities to extend the season of specialty produce items.

Shelf Space Allocation

Computer programs such as Direct Product Profitability (DPP) are gaining popularity among

supermarket chains (Tanner). These programs are used to determine the most profitable allocation of shelf space based on contributions to overhead. However, such programs have limited penetration into the produce section. Only three respondents acknowledged that their chains use formal computer programs for shelf space allocation. One of these uses DPP while the other two use internally developed programs. Even when available, the use of these programs in the produce department is limited. One merchandiser stated that they use the programs as another source of information, but not as a strict format to follow. He stated that "Many produce items would not be carried if their profitability was the only consideration used in space allocation. Programs cannot account for the perception of variety achieved by a wide range of items." He further indicated that the main use of the program is with value-added products that require in-store processing. The programs help to track and compare labor costs of different items.

Most merchandisers seemed skeptical of the usefulness of such programs in the produce department. Most indicated that the use of computer programs as strict planning guidelines does not have much appeal to store-level management. Successful produce management was described as being based on "instinct and experience." Another merchandiser explained that "it is much more beneficial to know your clientele, what their needs are, rather than have someone at the corporate office designing a planigram for the whole country and not providing the flexibility to deviate from that to give the consumers what they are looking for."

By far, the most common criterion used for allocating shelf space in the produce department is product movement. Merchandisers typically set prices based on procurement costs and some percent margin. Therefore, more space is allocated to those items that sell in the most volume, with only small consideration given to the actual contribution to overall profit. The decision to continue to carry a product may be based almost entirely on the percentage sold because merchandisers know how much they need to sell to make a profit. Therefore, merchandisers use movement as a proxy for profitability. Firm image also comes into play again. A store may carry small

volumes of specialty items, selling them at or near cost, just to meet the firm's image goals. As long as the product sells a certain volume, the store will carry the item regardless of direct contribution to profits. Perishability is another factor that interacts with movement to determine space allocation. More perishable items receive less shelf space.

Introduction of New Produce Items

While few firms have formal methods for testing new produce items, general procedures for introduction can be described given the source of motivation to carry the items. Most merchandisers indicated that they are sensitive to consumers' requests, and the informal policy of some large full service chains requires that any item requested by a customer be carried if available. For the most part, however, variety in the produce section seems to be supply driven. Most merchandisers indicated that shippers inform them about new products that become available, and often supply point-of-purchase display materials and extra produce for in-store sampling. Merchandisers also obtain information about new varieties and new items through trade publications and industry meetings.

When consumers initiate product introductions, they may express their interest in a particular item at any of various management levels depending on the size of the firm and the accessibility of employees in each level to consumers. The most common first contact is through the produce manager or the store manager, although some merchandisers indicated that they have been contacted directly by consumers. While some full service firms may introduce a new item based on only one request, most firms require several requests to initiate action.

Information is passed from the level at which an initial request is made, through the management structure, and finally to the produce merchandiser. The merchandiser first must determine whether the new item is compatible with the chain's image. In some cases, the chain may have a policy restricting certain items. Next, the merchandiser determines if there is sufficient expressed demand to justify introducing the prod-

uct. If apparent demand is sufficient according to firm standards, the next step is to determine the availability of the product. If sufficient quality and quantity can be obtained, the new item is distributed to a store or number of stores, based on the merchandiser's perception of the product's appeal.

The second scenario for product introductions is when shippers promote new items. In this case, the shipper contacts the produce buyer or merchandiser with information about a new product. The merchandiser considers firm image and demographic characteristics of the market, as well as the quality of the product and the reputation of the shipper. Shipper support, such as point-of-purchase displays, enhances the willingness of merchandisers to introduce new products. If all of these criteria are met, the product is offered to consumers.

In either of the above scenarios, merchandisers employ a variety of tactics when introducing new items. While some provide only a list of available items to their stores, most merchandisers indicated that they force-distribute new items to each store or a subset of stores. One merchandiser couples the distribution of a new item with four weeks of consumer advertising. Another merchandiser advertises the product only if it shows promise based on reorders. One merchandiser believed that some chains fall short in providing consumers with information about new items. He stated that "People want to try new things. They'll buy it once, but if they don't use it properly, they're not going to like it and they won't make repeat purchases." This chain includes recipes for new items in weekly newspaper inserts. One merchandiser indicated that before the chain carries a new item, he wants to see it, taste it, and check prices and availability. Next, the new item is placed in the stores for a week before any promotion is started to give store personnel time to learn about it.

Several merchandisers indicated that new items are tested only for longevity. They will carry a new item as long as sales volume is sufficiently high. If sales remain strong, they will carry the item for its total available season. If sales drop below some predetermined threshold

level, they may drop the item during the current season and try it the next season that it becomes available. Consumer feedback can be important in this type of test. Consumers sometimes complain when an item is discontinued. Often, consumers inquire about the availability of an item that they purchased during the previous year in a particular season. Such feedback encourages retailers to carry the item again. If no customers notice that the item is gone, however, the likelihood of carrying the item again is reduced. The item also may be discontinued if the quality standards drop below those required by the merchandiser.

Produce Procurement

Warehousing versus Direct Store Delivery

Each chain in the study moves some part of their fresh produce through a central warehouse, whether owned by the chain itself or an independent wholesale distributor. In addition, firms can be categorized into one of three groups based on their use of direct store delivery. Two firms use direct store delivery extensively. Three firms allow no direct deliveries to their stores at all. The other twelve firms use a limited amount of direct store delivery within certain guidelines.

The three firms that allow no direct store delivery maintain their own warehouses and place a great deal of emphasis on uniformity among stores. Produce merchandisers at these firms indicated that a main concern with direct delivery is the loss of control over quality. With direct delivery, the produce manager at each store is responsible for judging quality of the product. As a result, large firms have many people making judgements about quality characteristics of the produce sold in the stores. While the loss of control is a major concern to all merchandisers, some have established strict guidelines to allow for direct delivery. The firms that do not use direct store delivery are also unlikely to deal with small, local producers. Merchandisers at these firms stressed that they only deal with producers that can supply sufficient quantity to service all of their stores through the warehouse. Smaller growers may participate in such markets through cooperatives.

The two firms using direct store delivery extensively do not operate their own produce warehouses. One chain encourages produce managers to purchase from local producers during the local production season when possible. The other firm has agreements with several producers that grow exclusively for the chain. These items are usually delivered directly to the store, although some items are occasionally moved through a warehouse.

Of the remaining firms, basically two types of direct store delivery are used. The first type involves fresh items that are highly perishable or otherwise not compatible with warehouse processing. For example, two respondents described using direct store delivery for highly perishable items such as mushrooms. One of these merchandisers indicated that the chain's use of direct store delivery is diminishing, and will be limited to only a few highly perishable items in the future. Problems cited with direct store delivery include the inconsistency of having different managers making decisions on quality and the congestion of tying up the back door with many deliveries from different small producers. Instead, the firm has established a separate warehouse for accepting deliveries from local producers. To facilitate sales by smaller producers, the warehouse has no minimum quantity restrictions.

The second type of direct store delivery is one in which a producer makes a formal agreement with the retail chain to service one store or a group of stores in a certain area. Such agreements usually continue over a period of years. The relationships are usually initiated by growers. When a produce or store manager is contacted by a grower interested in supplying significant amounts of produce to a store or a group of stores, the information is passed up to the produce merchandiser. The merchandiser then contacts the grower to evaluate the ability to meet the requirements of the chain. Requirements may include assurance that the produce is locally grown and that it will be of acceptable quality and of sufficient quantity. If the grower meets the requirements, a formal agreement is established. The agreement may be a list of items that the grower is authorized to bring to the stores, or it may be a broader contract including provisions for com-

modity guarantees, contact persons, and grower insurance. The merchandiser at one chain indicated that if a particular store runs out of an item, the produce manager at that store is authorized to purchase it locally if the product meets the chain's quality standards. The merchandiser for another chain explained that he encourages growers who contact him to market through a wholesale distributor if they have sufficient quantity. This allows the chain to get the product to every store more easily. The wholesaler, however, will not deal with growers that are too small to provide minimally sufficient quantities.

Requirements for warehouse delivery were discussed by merchandisers from chains that operate their own produce warehouses. These requirements presumably hold for warehouses operated by wholesale distributors as well. Merchandisers stressed that the field heat must be removed from produce as soon as possible after harvest to extend shelf life. The produce then must be graded and packed to strict standards so that buyers know what they are getting. The produce must be packed in containers that can be handled by pallet. All packages should be marked clearly with the grower's name. To establish a good relationship with the retailer, the grower must provide accurate harvest information and be prepared to stand behind the product.

Retailer Perceptions of Local Growers

Most of the merchandisers interviewed are interested in dealing with local growers, but hold reservations about the ability of local growers to meet the needs of the retail market. Most merchandisers are concerned about the ability or willingness of local producers to invest in technology necessary to remove field heat and extend the shelf life of produce. Most merchandisers also expressed concern over the packing and grading reputation of local growers. One merchandiser described a "processing mentality" among growers in certain regions: "Why should I [the grower] go to the trouble of merchandising my product in a certain box, with a certain characteristic, when for a dollar and a half less, I can take it to the processor. That's the mentality that they pack under and they wonder why they don't have good acceptance" at the fresh retail market.

Several merchandisers believe that local growers do a very poor job of marketing what they grow. There is also a great deal of concern about growers' lack of understanding of the retail system. One merchandiser suggested that "producers need to follow their product all the way through the system to understand retailers' needs." A different merchandiser stated "Another important thing for people to think about is that dealing with produce is not just putting it in the ground, harvesting it, and putting it on a truck. It's important that [growers] try to remember that they need to think of it as being their product from the time it starts as the seed to the time it gets to the consumer's plate. I say that because there are a lot of farmers that I have dealt with over the years who have excellent product. However, when it comes to harvesting, packaging, shipping, icing and doing all the finer points to get the product into our back door at its maximum quality, they lose sight of it." Another merchandiser felt that producers "grow a lot better than they pack." That is, local producers are capable of producing fresh fruits and vegetables of commercial quality, but lack the commitment to process and package the produce in a commercially acceptable manner.

Comments such as the above suggest that a barrier to entry that local producers must overcome is the perception of merchandisers and buyers. The only way to improve the image of local producers is to establish good, long-term relationships with retailers. This is especially hard for new producers to accomplish because of what one merchandiser termed "the loyalty factor." One retailer said "We have dealt with a number of growers that have our business; and, even at a cheaper price, it's going to be hard to pry us away from them because of their consistent size, color, packing and delivery. If we call them up and say that we're short and need another truck load, they'll have it here for us this afternoon. Those are the kind of consistencies that it takes a long time to develop with produce retailers." The existence of such relationships shows the need for new producers to learn about the retail market. Rather than compete with existing relationships, producers need to identify commodities having inconsistent supplies or poorly established supply relationships.

Implications

During interviews merchandisers persistently expressed doubts about the willingness of small, local produce growers to adopt practices conducive to the establishment of marketing relationships. Although small producers lack the economies of scale that enable large producers to invest in equipment and facilities, several institutions may provide small firms with the support needed to establish relationships. Marketing cooperatives can provide physical facilities that enable small producers to meet packing and cooling requirements. Grower cooperatives may also market collectively, reducing individual costs for locating buyers. In Virginia, for example, a proposed Farmer's Market Network would provide more facilities to small growers.

Fruit and vegetable growers traditionally have operated with a production concept: consumers will favor those products that are high in quality, widely available and low in cost. These growers concentrate on increasing production efficiency and producing high quality produce, given constraints of growing conditions. While many producers of staple commodities with established marketing channels may successfully continue with this approach, new producers or those interested in penetrating a new market should adopt the marketing concept. Under the marketing concept, the firm must determine the needs and wants of buyers in target markets and deliver the desired commodities more effectively and efficiently than competitors (Kotler). For the fresh produce grower, the relevant target market is two-fold: both the ultimate consumers of produce and the intermediate buyers must be considered. Familiarity with consumer tastes and preferences, especially new consumer trends, is necessary. However, the producer must also know the needs and wants of the retail firms that constitute the immediate market.

Findings of this research suggest that firm image is of particular importance for understanding decisions related to shelf space allocation and produce procurement. Full service chains offer a greater variety of produce than other firms in the sample. Most full service supermarket chains, because of their emphasis on uniformity among

stores, allow the least amount of freedom at the store level for shelf space allocation and use the least amount of direct store delivery.

Chains that use direct store delivery are more likely to deal with small producers. Conversely, chains that require all produce to pass through their warehouses have greater volume requirements that may prove prohibitive to small producers. While full service chains carry a greater variety of specialty items, they are also less likely to work with small producers. Could a grower of specialty produce provide enough to supply an entire full service chain? While some retailers felt that specialty items are not carried in sufficient quantities to justify new producer entry, a core of specialty products has developed among firms of varying sizes and organizational structures. Thus, growers willing to place special emphasis on quality, handling, and packaging may be able to supply several retailers with select specialty produce items.

Growers looking for a marketing niche need to make initial contact with retailers, since most direct store delivery relationships have been initiated by producers. Although most firms are hesitant about forming new relationships and have stringent requirements that must be met by producers, this is an avenue for market entry that should not be overlooked. Direct store delivery could serve as a starting point for a small producer. By establishing a good reputation for quality and dependability in serving a small number of stores in a chain, the producer might then be able to expand production to meet the needs of the entire chain.

The results of this study confirm the conditions for market entry described by Runyan *et al.*: consistent quality, even sizing and grading, proper product maturity, anticipated arrivals, removal of field heat, and grower organizations. Producers must meet these requirements before seeking to establish the informal relationships common to the fresh produce industry. McLaughlin considered these relationships to be major barriers to entry. Merchandisers in the interviews also stressed the importance of good relationships, stating that new producers would have a hard time penetrating the

market because of the "loyalty factor" between established growers and buyers.

Economic behavior underlies buyer loyalty to longtime suppliers. The goal of the supermarket chain in procuring produce is to provide a consistent supply of goods to consumers throughout the year. Chains invest time and resources to locate suppliers capable of meeting their needs. Such search costs can be minimized once relationships are established with a set of reliable suppliers. Also, an established relationship with a supplier protects the retailer from the uncertainty of dealing with a variety of unfamiliar suppliers. Economic considerations help to explain why one retailer stated that he would not break from established suppliers, even if goods could be provided at a lower price. Thus, reliable markets await growers willing to overcome the barriers to establishing initial marketing relationships with retailers.

References

- Capps, Oral, Jr. "Changes in Domestic Demand for Food: Impacts on Southern Agriculture." *Southern Journal of Agricultural Economics*, 18 (July 1986): 25-36.
- Chain Store Guide -- 1990 Directory of Supermarket, Grocery, and Convenience Store Chains*. New York: Business Guides, Inc., 1989.
- Dean, John P., Robert L. Eichhorn, and Lois R. Dean. "Observation and Interviewing." *An Introduction to Social Research*, 2nd ed., John T. Doby, ed. New York: Meredith Publishing Co., 1967.
- Eastwood, David B., John R. Brooker, and Robert H. Orr. "Consumer Preferences for Local Versus Out-of-State Grown Selected Fresh Produce: The Case of Knoxville, Tennessee." *Southern Journal of Agricultural Economics*, 19 (December 1987): 183-94.
- Epperson, J. E., and L. F. Lei. "A Regional Analysis of Vegetable Production with Changing Demand for Row Crops Using Quadratic Programming." *Southern Journal of Agricultural Economics*, 21 (July 1989): 87-96.
- Henneberry, Shida Rastegari, and Charles V. Willoughby. "Marketing Inefficiencies in Oklahoma's Produce Industry: Grower and Buyer Perceptions." *Journal of Food Distribution Research*, 20 (September 1989): 97-109.
- Imming, Bernard J. *Produce Management and Operations*. Cornell University Food Industry Management Home Study Program. Cornell University, Ithaca, New York. 1983.
- Kotler, Phillip. *Marketing Management: Analysis, Planning, Implementation, and Control*. 6th ed. Englewood Cliffs, N.J.: Prentice Hall, 1988.
- Linsen, Mary Ann. "And the Produce Beat Goes On." *Progressive Grocer*. June 1988, pp. 131-137.
- Lopez, Rigoberto A., Emilio Pagoulatos, and Leo C. Polopolus. "Constraints and Opportunities in Vegetable Trade." *Journal of Food Distribution Research*, 20 (September 1989): 63-74.
- McLaughlin, Edward W. *Buying and Selling Practices in the Fresh Fruit and Vegetable Industry: Implications for Vertical Coordination*. Unpublished Ph.D. dissertation, Michigan State University, 1982.
- Nonnecke, Ib Libner. *Vegetable Production*. New York: Van Nostrand Reinhold, 1989.
- "Produce." *Supermarket Business*. October 1989, pp. 43-50.
- Rogers, Richard T. and Julie A. Caswell. "Strategic Management and the Internal Organization of Food Marketing Firms." *Agribusiness: An International Journal*, 4 (January 1988): 3-10.

Runyan, Jack L., Joseph P. Anthony, Kevin M. Kesecker, and Harold S. Ricker. *Determining Commercial Marketing and Production Opportunities for Small Farm Vegetable Growers*. USDA, AMS, No. 1146. Washington, D.C. July 1986.

Stegelin, Forrest, Lionel Williamson, and Steve Riggins. *To Market, To Market to Sell Fresh Produce; But Where? And When?* Staff Paper # 264, Department of Agricultural Economics, University of Kentucky, September 1989.

Tanner, Ronald. "Computerization: The Future is Now." *Progressive Grocer*. Volume 66, No. 1, January 1987, pp. 40-44.

Zwingli, Michael E., William E. Hardy, Jr., and John L. Adrian, Jr. "Reduced Risk Rotations for Fresh Vegetable Crops: An Analysis for the Sand Mountain and Tennessee Valley Regions of Alabama." *Southern Journal of Agricultural Economics*, 21 (December 1989): 155-65.

