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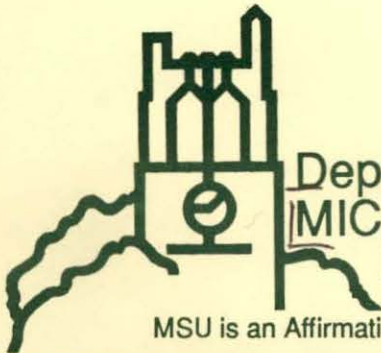
THE MICHIGAN APPLE INDUSTRY-- A MARKETING OVERVIEW

by Donald Ricks

Staff Paper No. 91-4

January 1991

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THE MICHIGAN APPLE INDUSTRY--A MARKETING OVERVIEW

by Donald Ricks

The Michigan Apple Industry

The Michigan apple industry produces an average of about 22 million bushels of apples with a high of 26 million bushels. Even though Michigan is one of the largest apple-producing states in the country, it is far behind the industry's dominating state of Washington.

There are about 1,500 apple growers in Michigan. Of these there are 350 growers who have 50 acres of apples or more. These 350 larger growers represent 23% of the total number of growers but produce over 75% of Michigan's apple production.

One important aspect of apple marketing from a Michigan perspective is the very large importance of Washington in regard to many apple marketing aspects. Washington provides everyone such very strong competition, particularly in fresh markets, but also in processing markets, which are important for Michigan. The preponderance of Washington and its influence on apple markets throughout the United States means that it is very important for Michigan as well as any other apple producing state to analyze closely what is happening in the Washington apple industry.

Major Market Utilization

Michigan markets its apple crop in four major market categories: (1) fresh, (2) juice, (3) applesauce, and (4) slices. Apple slices include both frozen and fresh slices. The amount sold into each one of these major markets is summarized in Table 1. The fresh market is the largest single market for Michigan, with 35% of the crop being sold fresh. This is a smaller percent that is sold fresh than in the U.S. as a whole. Nationally an average of 56% of the apple crop is sold fresh. The higher percent nationally that is sold fresh is in part because Washington sells a much higher percent of their crop fresh, and many of the medium-sized to smaller apple producing states also sell a high percentage of their crop fresh.

Table 1. MICHIGAN AND U.S. APPLE CROP UTILIZATION, 1985-1989

	<u>MICHIGAN</u>		<u>UNITED STATES</u>	
	<u>VOLUME</u> - mil. bu. -	<u>PERCENT</u>	<u>VOLUME</u> - mil. bu. -	<u>PERCENT</u>
FRESH	7.6	35	121.4	56
JUICE	6.8	31	49.1	23
SAUCE	4.5	20	30.8	14
SLICES	2.9	13	6.1	3
DRIED	-	-	6.2	3
OTHER	0.2	1	1.7	1

Source: USDA

Michigan has well-developed and important processing markets, including processors of applesauce and apple slices. There is 20% of the Michigan crop which is sold for applesauce. This is higher than the national average, with about 14% of the U.S. crop being sold for sauce. Michigan has a number of large, well-established sauce processors and has some regional competitive advantages in this market, along with its history of producing substantial quantities of applesauce. There is, on the other hand, very strong competition for Michigan sauce markets provided by applesauce processors in New York and the Appalachian region as well as in Washington.

The U.S. market for apple slices is much smaller than is either the market for fresh apples or for applesauce. Michigan, however, has a substantial percentage of the slice market, with almost 50% of the national market being produced in Michigan. Apple slices take 13% of the Michigan apple crop. This is quite a bit higher than the 3% of the U.S. crop which is sold for slices. Michigan has some major advantages in the slice market, particularly with certain premium varieties for this market utilization. However, competition in this market is very strong and is increasing. Competition for the apple slice market is provided by some traditional processing areas like Appalachia. Increasingly, in recent years, more competition for apple slices is being provided also by processors in Washington and by California. Therefore, in both

the applesauce and apple slice markets, Michigan will need to make continued concerted efforts to maintain its position in these highly competitive markets.

Michigan sells an average of 31% of its crop for apple juice. This is higher than the national average, which is about 23% of the U.S. crop sold for juice. The fact that Michigan sells almost 1/3 of its crop for juice is regarded by many in Michigan as a rather dubious distinction. This is because juice is considered a salvage market for apples which are grown primarily for fresh or peeler processing markets, but, for one reason or another, do not make the quality requirements for the other primary markets. Since juice is the lowest priced market, it may be desirable to reduce the percentage sold for juice in order to increase returns to growers. On the other hand, the juice market is important. Many in the Michigan industry regard it as important to have large-volume juice processing outlets in order to be able to market the apples which because of quality considerations need to be sold in this way. Therefore, Michigan is pleased that they have a substantial juice market, even though returns from this market are less than from other major uses.

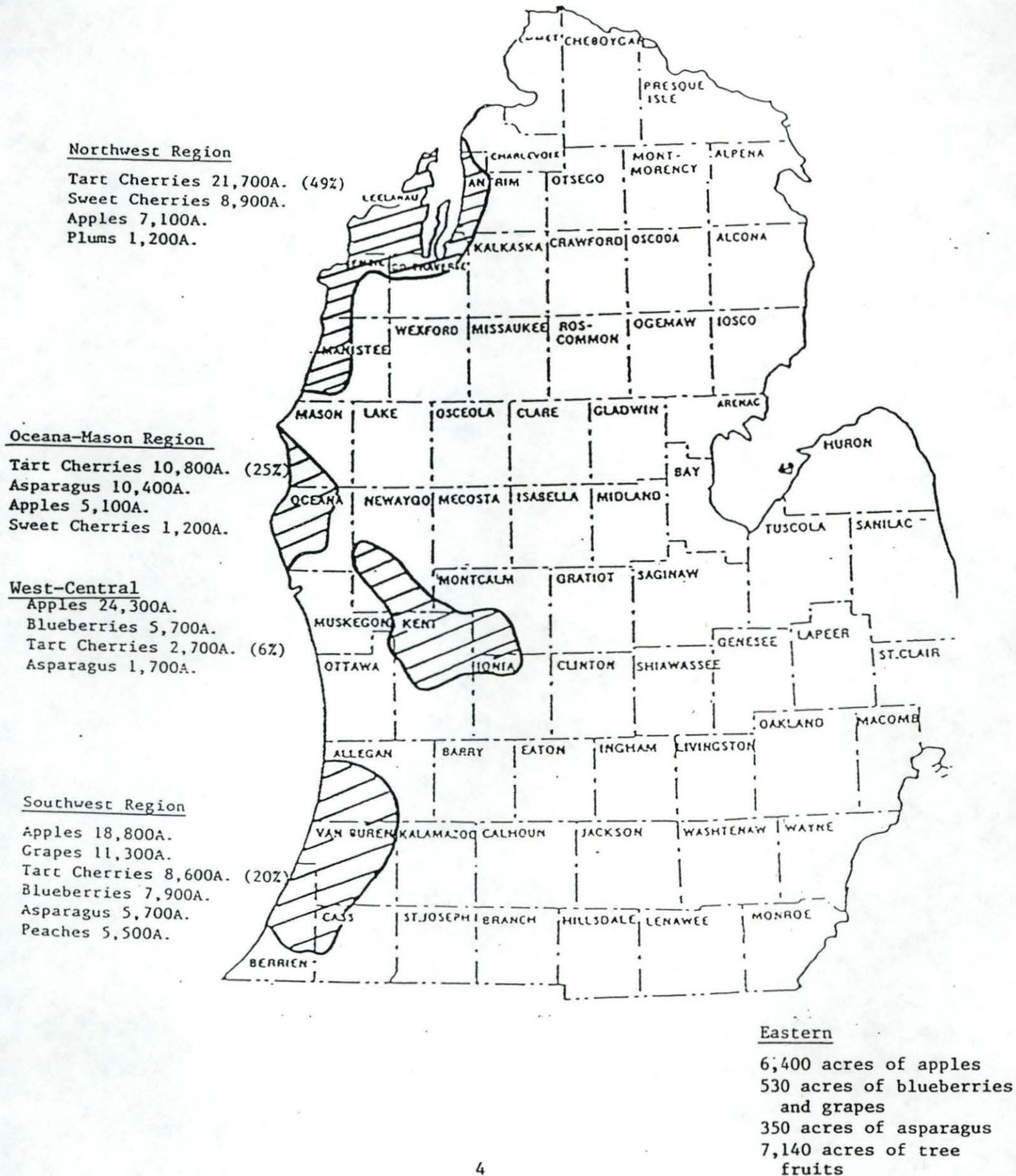
Apple Growing Regions in Michigan

Apples in Michigan are raised in five major regions (Figure 1). Four of these regions are concentrated fruit-producing regions in which apples may be grown in combination with other tree fruit crops.

The region designated West-Central in Figure 1 is the most important apple-growing region in Michigan. There are 24,000 acres of apples in this region, according to Michigan's latest orchard survey, which was done in 1986. This region, therefore, has about 40% of Michigan's apple acreage.

Growers in the West-Central region tend to specialize heavily in apples. Some of them grow a few other fruits such as peaches or tart cherries, but the other fruits are usually considerably less important than are apples for most growers in this region. This part of the

FIGURE 1. MICHIGAN'S MAJOR FRUIT AND ASPARAGUS PRODUCTION REGIONS



state has a high percentage of the fresh packers, shippers and apple storages in the state. Many fresh market apples from other parts of the state are hauled to this region, to be stored, packed, and sold. So this West-Central region is a predominant part of Michigan's apple industry.

The West-Central region is the area which has had the largest recent expansion of apples in the state. This area contains a substantial number of large, commercial apple growers who are very committed to apples on a long term basis. If apple growing were more profitable than it has been in recent years, this West-Central region would probably expand apple acreage considerably beyond the present.

The second most important region in Michigan is the Southwest Region. There are almost 19,000 acres of apples in this region, according to the latest orchard survey. This is about 30% of Michigan's apple acreage. Growers in this region raise apples both for fresh market and for peeler processing. There are some important fresh packer-shippers in this area. The Southwest region is one of substantial diversity of many tree fruits, grapes, and vegetables. Although apples are one of the most important crops in this region, farmers in this area usually grow several different fruit and vegetable crops on the same farm.

In the Oceana-Mason region, apples are often grown in combination with other tree fruits and with asparagus. Asparagus and tart cherries are very important crops in this region. There are about 5,000 acres of apples in the Oceana-Mason region.

There are in the Northwestern region 7,000 acres of apples. In this part of the state cherries are by far the predominant crop. Apples are usually a more secondary crop for most farms along with the larger acreages of cherries, both tart and sweet. Apples plantings have been expanding in Northwestern Michigan in recent years. If apples were more profitable, this region would probably expand apple production considerably more.

The other apple-producing region in Michigan is called Eastern Michigan. In this region apple growers are dispersed widely throughout much of the eastern portion of Michigan rather than being concentrated as is the case in the other four regions. Eastern Michigan apple growers mostly emphasize retailing direct to consumers through their farm markets and U-Pick.

This is partly because they are located near major population centers in Southeastern Michigan such as Detroit. Most growers in this region will, however, have greater production than they can market retail direct to consumers. Therefore, they will sell some of their extra production wholesale. The wholesale marketings of these eastern Michigan growers will usually be sold through packer-shippers in the western part of the state or/and through processors in western Michigan. Eastern Michigan has had 6,000 acres of apples. They have shown some decrease in apple acreage during the 1980s.

The Apple Marketing System

A diagrammatic outline of the Michigan apple marketing system is shown in Figure 2. This diagram shows most of the major markets and market channels for apples, although some of the more minor ones are left out in order to simplify the overall situation.

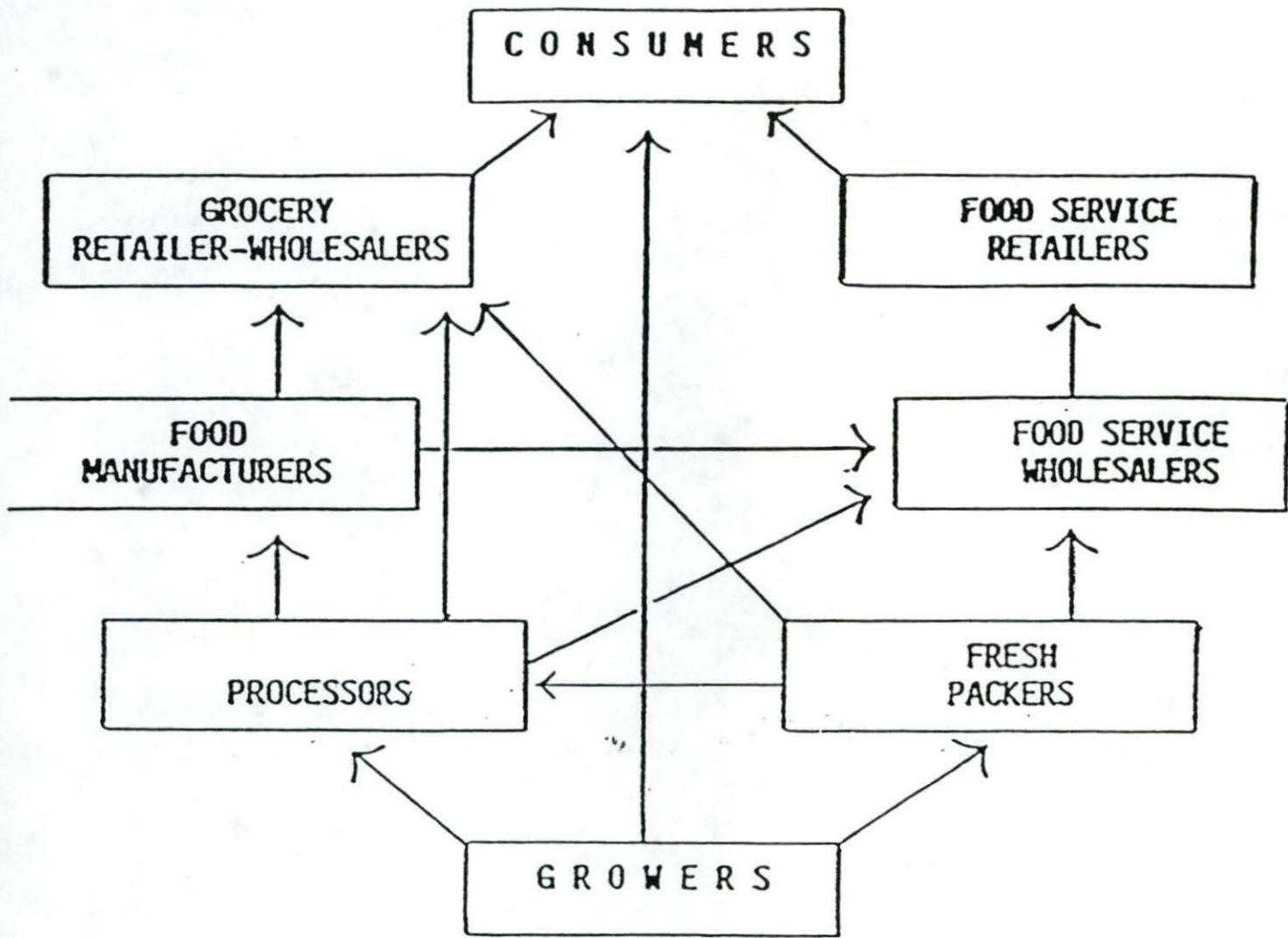
As mentioned previously, some growers, especially in Eastern Michigan, sell some of their crop directly to consumers through their farm markets and with U-Pick. A few growers in Michigan's more concentrated production regions also use this marketing method for some of their production. A fairly small percentage of the Michigan crop is, however sold this way. Although comprehensive figures are not available, perhaps around 10% of the state's apple production is marketed direct to consumers.

For fresh market apples, the largest percentage of apples are delivered by growers at harvest time to a fresh packer for packing, storage, and sales. Most fresh packers are large growers themselves, who pack their own apples plus the apples from many other growers. The largest fresh packers pack considerably more apples for other growers than they grow themselves. A few of the larger growers pack only their own fruit themselves. However, there is a tendency for the packing to be more concentrated in the hands of fewer, larger packing houses who specialize in this important function for the fresh market.

Most of the largest fresh packers are also shippers who do the sales and marketing of the packed apples. There are, however, a substantial number of medium-to-smaller sized fresh packers who are not shippers. These packers will have the sales and marketing of the packed

FIGURE 2.

APPLE MARKETING SYSTEM



apples done by a larger fresh shipper. Some of the largest fresh shippers handle the sales and marketing for 15-20 packing houses. Most fresh-packed apples are sold by the shipper by phone in large lots to large grocery customers such as chain stores. Some are also sold to other fresh wholesalers who serve smaller grocery retailers. A small percentage of the fresh-packed apples from Michigan go into the food service portion of the marketing chain. Most are sold through grocery retailers.

There has been somewhat of a long-term trend towards fewer, larger shippers. However, in recent years, there has been several new shippers enter the business as well. A number of people in the Michigan industry feel that there are still too many shippers for the strongest possible marketing and pricing in the industry. The bulk of the fresh apples are marketed wholesale by packer-shippers. This is similar to the way large volumes of apples move through the wholesale marketing system throughout much of the United States.

There are few medium-sized grower-packers who pack their own apples and deliver them directly to smaller grocery stores. This marketing method, however, is relatively minor for the state as a whole, although it can be fairly important for certain individual grower operations.

Apples for processing are often sold by growers directly to processors. Most growers have some blocks of certain varieties that they grow and sell for processing. Processing apples also include some that are sorted out of fresh packing lines because these apples do not meet the quality requirements, such as for color or size, for the fresh market.

Some of the processors are proprietary or investor-owned firms and some are cooperatives. Some of the applesauce processors have recognized brand positions. Other sauce processors pack private-label applesauce or applesauce for food service markets or for School Lunch purchases by the U.S.D.A. Applesauce is, of course, sold by processors directly to grocery buyers and some into food service markets.

Apple slices, both frozen and fresh, are an industrial ingredient commodity which are sold to food manufacturers. Food manufacturers make the apple slices into finished consumer

products such as apple pies, desserts, TV dinners, etc. Then the food manufacturers are the ones that market these value-added food products through grocery and food service markets.

Apple juice processors involve several different types of operations. There are a number of small grower-retailer cider operations. These press mainly their own apples to sell as cider through their own retail farm markets. There are also a much smaller number of large juice processors who make pasteurized apple juice for wholesale markets such as through grocery stores. These processors use a large volume of juice apples in Michigan. Their raw product supplies come from (a) drop apples which growers pick up in the fall, (b) sortouts from fresh packing houses throughout the year, (c) undersize sortouts from peeler processing apples, and (d) peels and cores from peeler processors. These juice processors also have frequently used some imported apple juice concentrate to keep their costs competitive with the cheap imports. Imported concentrate is often used to mix with juice from raw apples for both cost reasons and to maintain consistent quality including brix and taste. There used to be a number of plants which made concentrated apple juice in Michigan. Most of these, however, are no longer in the concentrating business because of the fierce price competition from imported foreign concentrate.

Apple Industry Organizations

In addition to the important segments of the apple marketing system shown in Figure 2, Michigan has several industry-wide organizations. One of these is the Michigan Apple Committee, which is an industry promotional commission whose objective is to expand demand for Michigan apples as much as possible. The Michigan Apple Committee has an active program of promotion, advertising, and related activities. They also have a staff who call on the grocery and food service trade promoting Michigan apples and their usage. The Michigan Apple Committee also represents the Michigan apple industry on various governmental issues of importance to the apple industry.

The Michigan Apple Committee is financed by mandatory grower assessments on all apples produced in Michigan for both fresh and processing. This is done with the use of a

Michigan P.A. 232 state marketing program. Although financed by the growers, the Michigan Apple Committee works closely with fresh shippers and with processors in their program activities in order to effectively expand demand for Michigan apples. The Michigan Apple Committee is Michigan's counterpart to the Washington Apple Commission. However, the budget of the Michigan Apple Committee is much less than that for the Washington Apple Commission.

The Michigan Apple Committee is linked to the national industry organization which is the International Apple Institute (IAI). The IAI is an important national organization in which various state organizations such as the Michigan Apple Committee, the Washington Apple Commission and the Western New York Apple Growers Association work together for common goals. Their programs include food publicity regarding apples, including articles on apples in magazines and newspapers. IAI also represents the apple industry on key issues such as on the Alar scare of a couple of years ago and on international trade issues which affect apples. As a result, the Michigan apple industry is tied-in an important way to the national industry efforts through their Michigan Apple Committee and the national counterpart, the International Apple Institute.

Michigan also has an active grower organization which deals with processing apples including the pricing and marketing of the processing apples. This organization is the Michigan Processing Apple Growers Division of Michigan Agricultural Cooperative Marketing Association or MACMA for short. MACMA deals only with processing apples in contrast to the Michigan Apple Committee which works with both fresh and processing apples. MACMA is a grower bargaining-marketing organization. Their goal is to try to get growers the highest possible price for their processing apples that is consistent with supply, demand and other market conditions. They bargain a series of processing apple prices both for peeler apples and for juice. They also work on a number of other apple marketing aspects as they try to expand and strengthen the processing market for Michigan apples as much as possible.

The MACMA processing apple division is linked to a comparable, broader national organization which is called American Agricultural Marketing Association (AAMA). This is a counterpart organization for pricing of processing apples in other states such as in New York. AAMA provides a broader, multi-state base for similar objectives to those that MACMA has in Michigan. MACMA and AAMA analyze and evaluate the national supply and demand situation for processing apples and with that analytical information they try to influence processing apple prices in a way that is favorable for growers but yet is realistic for the given market conditions.

Another organization related to apple marketing in Michigan, is the Michigan Apple Shippers Association. This association involves all Michigan apple shippers. It was formed several years ago by the shippers in order to provide a organization to deal with common problems and interests of the Michigan apple shippers.

Fresh Market Pricing Arrangements

Pricing arrangements for fresh market apples are influenced primarily by the market outlet that the grower chooses to use for that grower's production. If the grower markets retail through the grower's own farm market or by U-pick, the grower sets the retail price for that particular operation. This price is, however, influenced substantially by other competing grower-retailers in the area and indirectly by other apple retailers such as grocery stores.

Since the largest majority of fresh apples in Michigan are delivered by growers to other packer-shippers, this outlet provides the main pricing arrangement for fresh apples. In this case, the apples are consigned to the packer-shipper by the grower with the price or grower's return to be determined later. The packer grades and packs, and if necessary stores, the apples for the grower. The grower's returns are dependant upon the quality of the fruit which determines the pack-out or percentage which qualifies for the fresh pack. The prices for the packed apples are determined in the market for packed apples according to market conditions and by negotiations usually by telephone between the packer-shipper and the wholesale buyers. Hence the grower price or return is determined by the sales price for packed apples minus the costs of the packer-shipper for grading, packing, container, storage and sales. The sales price is often pooled or

averaged for all sales of the shipper for that variety, grade and type of pack for a specified pool period. Specific pooling methods vary from shipper to shipper. The result of the common pricing method for fresh apples is that the grower price or return is a residual that is based upon the above discussed factors including the grower's pack-out.

A few large growers are their own packer-shippers. In this case the grower price is the price for packed apples as negotiated by the grower-packer-shipper. This type of integrated grower who has undertaken the packing and shipping functions has, however, significant additional costs. The trend is somewhat away from this type of operation by growers. Rather there is a gradual trend for the growers to let a few large specialized packer-shipper firms undertake these functions.

There is a small amount of apples for fresh market that are sold orchard run or ungraded at a definite price at the time of sale. This type of sales and pricing arrangement is usually done at harvest time. There are two types of buyers for this kind of fresh apple marketing outlet. One of these is the trucker-buyer who drives to the apple producing region primarily from adjoining states to buy orchard run apples from the grower. Most of these trucker-buyers have farm markets or specialized fresh produce markets in areas located at moderate driving distances from the Michigan apple producing region. The number of trucker-buyers and the amount sold this way has been declining.

The other type of buyer that sometimes buys on an orchard run basis from growers for fresh market are storage operators or packer-shippers with substantial storage space. These buyers might buy orchard run apples at a definite price if there is a short crop and if they feel that they will not otherwise be able to fill their storage with their own apples or the apples of their normal growers. These buyers that buy orchard run fruit for a definite price to fill their storages for fresh market are usually only willing to do that in a short crop year. In normal or large-crop years they will usually be able to fill their storages with apples on consignment which involves much less risk to the storage operator.

In the Southwest part of the state, there is a long-established, organized wholesale market. Growers who use this market pack their own apples and haul them to the wholesale market. When the grower drives onto the market, wholesale buyers bid on the grower's packed fruit. Although this is an interesting pricing arrangement with the organized bidding, it is now a very minor volume market for apples. Many years ago it used to be major market outlet. One of the reasons for the decline of this market, especially for apples, is that it is difficult to get large volumes of uniform quality fruit marketed through this market arrangement. Therefore, it has become very minor in recent decades.

Some Challenges and Issues Related to the Fresh Market

There are several important challenges and issues for fresh apple marketing in Michigan. In general all of these are related to the overall challenging goal of trying to improve economic returns to apple growers, packers and shippers who operate in a highly competitive market environment.

Overproduction

One of the most important issues challenges to the apple industry is overproduction. Overproduction is particularly evident when there is a large crop nationally. When this occurs, there can be an excess of supplies relative to market demand with the result that apple prices can be quite low. This causes real economic problems for growers. Overproduction has been particularly evident in some recent years when Washington has had a very large crop. For Michigan this situation is particularly bad if both Washington and Michigan have a large crop along with a large national crop.

The "solutions" or improvement steps for this major problem are difficult and frustrating. The frustrations on this are particularly great from a Michigan perspective since much of the answers or needed adjustments to the national situation of oversupply or overproduction rest primarily in the state of Washington.

Expanding demand as much as possible for apples marketed both in the United States and for export is a very important part of the "solution" or market improvement scenario.

Washington is working quite vigorously on this. They have had some very notable market expansion successes. Michigan, too, is working on expanding apple demand and has had some favorable success during the last ten years. Despite the achievements in raising demand for apples, the increases in demand occur rather gradually over time. With the large production capacity now in the United States, if a large crop occurs, the production can overwhelm the demand growth trends resulting in low grower prices. Thus while demand expansion programs are a very important component of actions for this issue, demand expansion alone will not likely provide a quick, consistent and complete answer to the problem.

What about individual grower adjustments to the national overproduction situation? In general, it does not seem to be a time for large acreage expansion for U.S. apple growers. The overall supply-demand situation does not seem to warrant this. Any new apple plantings should be planned for improving farm efficiency and for higher quality especially for fresh markets.

The next few years seem to be an especially appropriate time to analyze the profitability of different apple blocks and to selectively take out those that are the least efficient and cannot return positive returns in these times of relatively low prices. Some selective removal may be especially likely to be appropriate for old, standard rootstock orchards unless they have received top management.

Much of the adjustment on both the demand and the supply side to the overproduction situation in the United States apple industry will need to occur in the state of Washington. This is because they are so large, and because Washington has had such a high percent of the nation's recent increase in acreage and production. What the apple industry in Washington does in regard to supply and demand conditions will have a very important impact on apple growers throughout the United States. Therefore one thing that a grower should probably do is to try to keep up on the changing supply and demand situation in Washington.

High Quality Which Is Needed To Be Competitive

Another very important issue or challenge for fresh market is the need to be competitive in regard to fresh quality. The market for fresh apples is increasingly demanding very high

quality fruit including, color, size and freedom from bruising. In addition, there is an especially increased emphasis on good condition or crisp, crunchy apples. There has also long been a market requirement that the apples must be completely free of blemishes from insects and diseases. This continues. There are also indications that some portions of the market are increasingly concerned about the taste of apples which will raise somewhat the priority of taste among the various aspects of apple quality. However, as of yet, taste still seems to be down the priority list a ways compared to the appearance and more recently to the crispness of apples. There is a need for more market research to clarify how taste ranks and how it is changing in the eyes of apple consumers.

Achieving the market requirements for all of the quality attributes for apples is difficult. Because of this, growers and packers would like to have consumers and the buying trade accept a somewhat wider spectrum of qualities than is the practice. However, that has not been the market response in recent years. The trend is in the opposite direction -- toward ever higher quality requirements. The competition, particularly the state of Washington, but also including California and imported apples, are supplying very high quality apples. These supply regions are also raising their standards especially in regard to crispness. Therefore, apple growers and packer-shippers must supply very high quality apples in order to be competitive in the market. If not, Washington will be especially likely to continue to increase its market share of the U.S. fresh market apples. They have plenty of supply and plenty of high quality apples to do it. This is a very important aspect for Michigan and for other fresh market apple-producing states.

Improving quality for fresh market involves, in part, actions by the grower to raise higher quality apples. Producing higher quality apples can also be a major way for a grower to improve returns through higher pack-outs.

Partly because of the importance of raising high quality apples, one overall strategy which seems appropriate for many growers is to do a better, more management-intensive job on somewhat less acres. One aspect of this, for growers who have acreages of old standard plantings, is to change as rapidly as economically feasible to more modern planting systems.

More modern apple planting systems provide special opportunities for higher quality as well as for more efficient orchard operations. However, a big drawback to this type of new planting is that it is very expensive. Very large capital investments are required to switch from the old established planting systems to the new more modern orchard systems. Obtaining the necessary capital investments may be difficult to achieve for growers particularly when their net returns are low.

Many growers can do a better job of pruning for desirable fresh market color and size. Some growers may be able to fine-tune their thinning for better size and their fertilizer program for best color. Depending upon a grower's situation, there may be various other production techniques which might be used to grow higher quality fresh market fruit. At least these are aspects that a grower should analyze to see if there is room for improvement to increase the grower's packout and grower returns.

Because of the importance of bruise-free apples for the market, growers need to give especially close supervision to the pickers to avoid bruising during harvest. Growers also need to be especially careful during the hauling operations in order to avoid bruising as the apples are taken from the orchard to the storage.

Another aspect which is increasingly important for the crisp apples that are increasingly more in demand in the market is that the apples that are going to be stored need to be put into storage quickly. Part of the grower's responsibility is to deliver the apples to the storage operator quickly after harvest.

There are, of course, many things that the packers and storage operators need to do too in order to provide the highest possible quality to the market. Providing information to growers as to when is the ideal time for picking is something that is needed more thoroughly in some parts of the apple industry and is a role that packer-shippers are doing increasingly. Storage operators, of course, need to get the apples into storage right after the grower delivers them. Storage operators need to load and unload CA storage rooms quickly in order to maintain the advantages of the CA atmosphere. As with more careful management on the farm, storage

operators also need to have especially careful management of storage temperature and atmosphere for maintaining apple quality.

In the packing houses, it is very important that the packers have well designed packing lines to avoid bruising, to continually monitor the lines for bruising and to revamp certain problem parts of the packing lines as needed in order to minimize any bruising. There has been substantial improvements in many packing facilities in order to reduce any potential problem on bruising.

Varieties for Changing Markets

Another major issue for fresh market apples is related to what varieties to grow for the future market. Because Michigan has long prided itself in having a number of high quality, and good tasting varieties, the Michigan industry has been somewhat perplexed about the great preponderance of emphasis on Red Delicious in the national market during 1970's and 1980s. On the other hand because of the demonstrated strong market preference for Delicious during these last two decades, Michigan too moved more into Red Delicious as indicated by the top position of Red Delicious plantings even in Michigan during the last 20 years. Now, however, within the national apple industry there is a lot of talk about new varieties such as Fuji, Gala, Jonagold and Braeburn. One major advantage of these varieties is supposed to be that they taste better than Red Delicious even though their appearance is considerably less beautiful than a large, 100% colored Red Delicious.

A key question is: To what extent will be the preferences of U.S. consumers switch from an emphasis on beautiful appearance like Red Delicious to good tasting but not so beautiful apples like some of the new varieties? If consumer preferences for these new varieties do not become widespread so that they only develop into small market niche varieties, then the U.S. fresh apple business will likely continue in a similar fashion regarding varieties to what it has been during the last two decades. However, if a major switch occurs regarding consumers priorities from beautiful appearance, as with Red Delicious, to excellent taste, like a new variety such as Fuji, then this change will be mean a major shift in variety aspects of the fresh

marketing of apples. To the extent that taste becomes more important than color and appearance, and hence that the new varieties gain substantially in popularity, in Michigan's position as a variety state could well improve. The Michigan apple industry certainly hopes that this is what will happen. Although the extent to which a change in variety preferences may occur is unclear at this time, it is an important issue that behooves apple industry people in all states to keep a close watch on.

The Size Of An Early Season Market Niche

Another issue for fresh apple markets is: To what extent in the future will there be a market niche for early season apples, such as in August before Washington's new crop of Red Delicious hits the markets in large supply? A number of years ago there was, in almost all years, a seasonal shortage of supplies in July and August after apples in storage had run out and before the new crop was ready for harvest. This substantial early season market niche was a major reason why Michigan planted a sizable acreage of Paula Red. This was also a major reason why there were a lot of Red Delicious planted in early harvest states such as North Carolina.

Michigan's Paula Red is an excellent quality early season variety. There has been a lot of enthusiasm for this variety in Michigan, and particularly in certain years it continues as a variety that can provide relatively good early season returns. However, the market niche for early season apples such as Paula Red is smaller today than it used to be. This is because of Washington's very large expansion of Red Delicious production and large expansion of CA storage capacity. As a result Washington usually markets its large Red Delicious crops on a twelve month basis. Because, there isn't the extent of the early season market niche that there used to be, this makes it more difficult for Paula Red and other early season apples. This is a key aspect for early season apple producing states as well as for early season varieties in Michigan such as Paula Red.

Other Possible Industry-Action Approaches Aimed At Increasing Returns

There are a number of factors that relate to the key question for growers: How to obtain higher grower prices from fresh apples? Part of this can be related to some of the topics just discussed such as avoiding overproduction, improving quality, careful planning of varieties which are the most desired by the market, and analyzing certain market niches. In addition, some Michigan growers have been concerned about the question: Are there other industry efforts which may be used to help get higher prices for growers?

One approach which has received some attention is to provide improved market information on prices and the various factors which affect the apple market as well as information on storage holdings. In Michigan the Michigan Apple Committee has long provided a storage report which shows current data for apple holdings by variety and whether these are held for processing or for fresh market. This is a very important and useful set of market information to the apple marketers. In addition a few years ago when the market information issue was discussed in the Michigan apple industry, it was recommended by the apple industry that USDA's Market News Service in Michigan expand its apple market report. This was done by the Market News Service and this expanded Michigan report included more detailed reporting on prices, shipments by variety and types of pack. This improvement in market news has been generally well supported and well received by the Michigan apple industry including shippers.

There has also been some interest in Michigan within the last five years in an even more detailed market reporting system for fresh apples such as is used by the Washington Growers Clearing House. Some people in Michigan, particularly some growers, feel that this might be a good idea for Michigan. This is a system supported by growers in Washington that involves a detailed reporting of prices and shipments by variety, type of pack, grade, etc. The Washington Grower's Clearing House also attempts from time to time to influence the prices that shippers ask for apples. Although there has been interest expressed by certain growers in this type of

approach for Michigan, it does not appear that something like this is likely to be implemented right away. It is an approach, however, that is discussed at times within the industry.

Another approach that has been used in Michigan for some time is that of a shipper or a sales agency handling the sales for a number of packing houses. As mentioned earlier, some sales agencies in Michigan may provide the sales and marketing for 15-20 packing houses. Most of these arrangements are private agreements between an individual shipper and the packers who work with that shipper. The net effect is fewer and larger sales agencies who handle this function for a number of packing houses instead of each packing house selling in competition with all of the others. Thus, there is a reduction in the number of sellers who compete with each other. This type of arrangement may be quite relevant for any fresh market state that has a number of sellers of fresh packed apples.

Marketing of Processing Apples In Michigan

The marketing of processing apples in Michigan involves some aspects which are different than for fresh marketing. On the other hand both processing and fresh market are closely interrelated with one another. Most Michigan growers raise some apples for processing even if they plan their operations mainly for the fresh market. All packers sell some sortouts to processors, both for peeler processing and for juice.

Pricing arrangements for processing apples are somewhat different than for fresh market apples. Some processors, particularly the proprietary or non-cooperative processors, buy apples for a definite raw product price. Some cooperatives also buy non-member tonnage at a definite raw product price. A definite price to the grower is in contrast to the predominant pricing arrange for fresh market in which case the grower returns or prices are not known until well after the apples are packed and sold. For some processors the price paid to growers is a cash-at-harvest price. In other cases there is a delayed payment schedule for at least a portion of the price paid to the growers.

Another difference for processed pricing compared to fresh is that the MACMA growers' association operates for processing apples in Michigan. MACMA bargains with

proprietary processors for their purchases of processing apples and with cooperatives for the portion that they buy from non-member growers. The results of the bargaining process also affect the prices received by co-operative member growers. Both the MACMA growers' association and processors analyze the supply, demand and other market influencing conditions each year prior to harvest. Based upon this analysis MACMA's grower committee develops a list of processing apple prices which they think are appropriate for that year's market conditions. This list includes different prices for different varieties, in some cases for different sizes, and, of course, different prices for juice in comparison to peeler processing apples. Processors sometimes disagree with MACMA somewhat regarding what prices are most appropriate for a given year. Then there may be considerable discussion and negotiation back and forth during the bargaining process. During this process MACMA bargains with proprietary processors, and their negotiations also include discussions and important interactions with cooperative processors to influence prices for all processing apples.

The marketing and pricing for processed apples in Michigan is influenced by a unique bargaining law called the Michigan Agricultural Marketing and Bargaining Act, or Public Act 344. This unique bargaining law has been rather controversial during its life, although in recent years the parties that it affects seem to be getting more used to it. They seem to be operating under it in a workable fashion.

Michigan's bargaining act or PA 344, strengthens the position of growers through their bargaining association such as MACMA. The law requires that processors must bargain with an accredited bargaining association such as MACMA. The law also provides that if the processors and the bargaining association can't agree upon a price, they must submit to binding arbitration. This binding arbitration provision has not been used much in recent years because the parties have usually come to an agreement without it.

There are some elements of cooperative pricing of processing apples in Michigan. The final prices and payments to co-op growers are based upon the average prices received for the processed apples minus the costs for the cooperative processor. The co-operatives also usually

have a target price which is based upon the harvest-time raw product prices. The co-op grower price is usually paid in several installment payments over a period of several months or maybe as much as a year.

With MACMA operating in the bargaining arena in Michigan, prices paid by cooperative processors are influenced substantially, although somewhat indirectly, by MACMA as well as are the prices paid by proprietary processors. This is partly because of the indirect effect of the bargaining process and partly because all processors, whether they are proprietary or cooperative, compete with one another for both finished product markets and for raw apples.

Some Challenges Or Issues For Michigan Processing Apple Markets

Although grower returns from peeler processing markets the last two years have been relatively good, particularly in comparison to certain fresh market returns, the processing situation is partly related to a temporary reduction in supplies in certain other apple processing regions. Thus, prices do not seem likely stay as good for growers as they have been. On the other hand, the reduced apple acreage in Appalachian states and in eastern New York appear likely to continue to somewhat benefit the supply-demand situation for processing apples and hence Michigan's position in future years. Despite these positive trends for Michigan, and the recent favorable processing apple prices, growers have the continuing long-run concern of how to make enough money to stay in the apple business.

Overproduction, or the threat of overproduction nationally, is a potential problem with processing apples as well as for fresh market. This is likely to continue, particularly if there are large crops in major processing states, such as New York and Michigan in the same year that there is a large crop in Washington. Although Washington and California sell a high percentage of their apple production for fresh market, their very large and expanding production is also expected to continue to increase the supplies for processing markets. This contributes to the potential for an oversupply in any particular year for processing apple markets. This is a major concern for established processing apple areas such as Michigan.

The Michigan processing apple industry people are also concerned about the tendency in some fresh market states such as Washington and California, to dispose of sort-outs for processing at extremely low prices. Some years the sort-outs for peeler processing from these states are sold at prices considerable below growers' processing apple prices in Michigan. Even though there is some transportation cost differential, the western states' approach on pricing sortouts for processing can provide extremely strong competition for Michigan processing apples as well as for other parts of the country.

The strong competition from western states is blunted somewhat by the fact that transportation costs to eastern U.S. markets are high and rising. In addition some western markets are expanding rapidly along with expansion of certain export markets for western processed apples. The west's competitive position is disadvantaged to a degree by the fact that much of the production expansion in Washington is Red Delicious which is generally considered to be an inferior variety for peeler processing. All of these factors seem likely to continue to work somewhat to Michigan's advantage.

The market competition for processed apples both in applesauce and apple slices is a very strong. Price competition is especially strong for private label applesauce and for government purchases as well as for apple slices since their's is an ingredient commodity market. If there was a higher percentage of the processed apples sold under strong national brands, the price competition might be somewhat less fierce. There is not an easy answer to this strong price competition in a complex industry such as the U.S. processed apple industry. It remains a continuing important challenge, however.

Processors in Michigan are concerned about keeping Michigan's prices for raw apples competitive with other states. Michigan has a history during the last two decades of having somewhat higher prices for raw processing apples than in other states. This is partly related to the successful bargaining activities of MACMA as supported by Michigan's unique bargaining law. The differences in grower prices for processing apples have not been real large in most years. Higher prices for processing apples are, of course, desirable for growers. Michigan

processors, on the other hand, continue to be somewhat concerned that this differential does not grow very large in order to maintain a sound competitive position for Michigan processors.

Summary

Apple markets, especially wholesale markets, throughout the U.S. are substantially inter-related. National supply and demand conditions, including the size of the national crop affect all apple markets to some degree or another. In part, because of this there are some similarities in apple markets and marketing in different parts of the country. There are, of course, some significant differences between regions as well.

With the increasing apple production in different parts of the U.S., and with expanding apple imports, the U.S. apple industry is facing plenty of marketing challenges. Demand for apples is fortunately also growing somewhat -- especially for fresh market and for apple juice. Hopefully during the next few years the apple industry will be able to respond to the challenges and to build on the positive aspects in order to have a profitable industry in the future.