Northern New England Product Development & Marketing Center

THE ORONO FARMERS' MARKET:
A CONSUMER SURVEY

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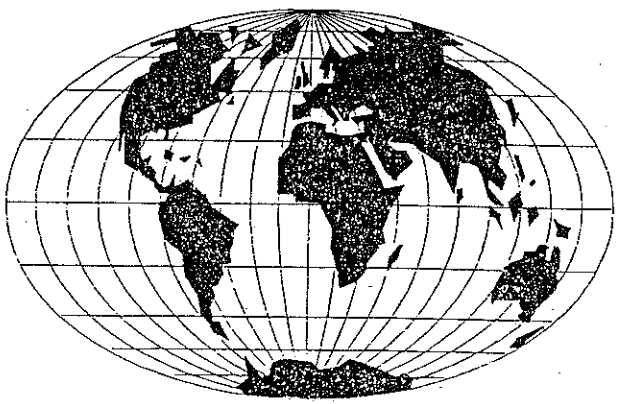
F.I. 004 **January 1997**

Food Products Initiative

Market Report



UNIVERSITY OF MAINE
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by Thula Gwebu, Alan Kezis and Stephanie Peavey*

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This material is based upon work supported by the C.S.R.E.E.S., U.S.D.A., under Agreement No. 92-34290-7135, and the Maine Agricultural and Forest Experiment Station. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture.

The Orono Farmers' Market: A Consumer Survey

According to the 1993 Maine Legislature, a farmers' market is defined as a " building, structure, or a place used by two or more farmers for the direct sale of farm and food products to consumers at which all the sellers meet the requirements stipulated on subsection 2 paragraph b" (Sec. 1 par. 7 MRSA #415). Subsection 2 paragraph b prohibits a vendor to sell products at a farmers' market unless "at least 75% of the product offered by that [vendor] was grown or processed by that person or under that person's direction. A product not grown or processed by that person must have been purchased directly from another farmer." (sub-chapter 1A, direct marketing of agricultural commodities). In the same legislation, the farm and food products are considered to be any "agricultural, horticultural, forest or other products of the soil or water, including, but not limited to, fruits, vegetables, eggs, dairy products, meat and meat products, honey, nuts, maple products, apple cider, fruit juice, wine, ornamental or vegetable plants, nursery products, firewood, and Christmas trees."

In Maine, there are numerous direct farm outlets that qualify as farmers' markets. They are located in various towns throughout the state. The focus of this research is on the Orono Farmers' Market (OFM) which operates out of a University of Maine parking lot adjacent to the Stillwater river in the centrally located town of Orono. The OFM began operating formally in the summer of 1994. Since then, the OFM has been adapting to the growing needs of its patrons. To demonstrate the size of the OFM, on a typical day at the height of the market season, the OFM consists of 12 to 15 vendors. The market itself is set up to form a semi-circle. This semi-circle takes up only one corner of the parking lot. A road cuts through the University of Maine campus providing easy access and free parking space for traffic flowing to the OFM.

This report presents the results of a survey conducted during the summer of 1995 of consumers who patronized the OFM. The underlying goal was to obtain information that would help the local farmers gain an understanding of their customers and thus be able to make more informed marketing decisions.

Objectives

The following objectives were determined at an OFM organizational meeting during January 1995:

1. Publicity

The farmers indicated a need for better publicity of the market. In particular, they were interested in identifying the most effective methods for advertising and promoting the market.

2. Determine Consumer Time Preferences

The farmers were concerned about the suitability of the time scheduled for market operation. Since 1994, the OFM hours of operation were Tuesdays and Saturdays from 8:00 a.m. to 4:00 p.m. However, the consumer traffic would typically subside between 12 p.m. and 1 p.m. and as a result, only a few vendors would remain at the market until 4 p.m. The farmers needed an idea of the consumers' time and day preferences in order to initiate changes in their hours of operation.

3. Improve Pricing Mechanism

The farmers' third concern was their pricing strategy: how could they determine a suitable price for their product? They wanted to know the consumers' responses to the prices at the OFM so that they could adjust the prices accordingly.

It is indeed difficult for the small farmer to capture a price level which is neither too high nor too low. In addition to the product pricing dilemma, the farmers needed to know of the consumers' willingness to pay a premium for high quality products at the market.

4. Establish Amusement Activities For Consumers

The final point of concern to the farmers was whether entertainment and family fun was a needed activity at the OFM. Would it draw in more consumers? Would it provide an increase in returns to the farmer? Did the consumers currently visiting the market want a diversity of activities and entertainment on market days, or were they content with just shopping?

The main objective of the survey was to provide answers to these questions and to establish a consumer profile of current patronage at the OFM. This information would indicate how the participating farmers could improve their services to the community and simultaneously improve their returns each season.

Procedures

Survey Design And Interview Protocol

Based on the interests and concerns of the vendors, survey questions were designed to gather information in the four specific areas: 1) consumer demographic information, which contained questions about annual household income, household size, age, and other similar information which would give farmers a better understanding of their customers. 2) advertising and promotion of the market, which focused on how consumers learned about the market, why they shopped there, how the market compared to other farmer's markets; 3) consumer usage of the market; including how much customers spent, how often they visited, what they usually purchased and their satisfaction with the product and market; 4) Consumer perceptions about product pricing and willingness to pay for various products at the market. The survey was pre-tested and the format was finalized May 1995 (See Appendix A).

The actual survey was conducted in the period between June and November 1995. The vendors set up their trucks and booths each morning in a semi-circle on one corner of the parking lot. On each of the two market days, Tuesdays and Saturdays, interviewers would place a box of surveys at a table beside a vendor.

Interviewers approached every person who came to the market, offered a brief introduction of the research, explained the purpose of the survey and asked for their participation. To achieve the best response rate, customers were asked to complete the survey at the market. However, to minimize refusals due to time constraints, customers were also offered the option of completing the survey form at their home and returning it by mail, postage paid. The majority preferred to complete the questionnaire at home.

A total of 239 surveys were completed yielding an exceptionally high response rate of 52% (Table 1). The general cooperativeness of the consumers can be attributed to their sincere interest in supporting the development of their local farmers' market.

Also, the distribution procedure which was based on person to person contact between consumers and project researchers is likely to have enhanced the participation rate.

Table 1. Response Rate.

Number of Questionnaires Distributed	464
Number of Questionnaires Completed	239
Response Rate	52%

Consumer Profile

The Sample Population

The following tables display the socioeconomic information on the patrons who visited the market during the study period. Table 2 shows the distribution of men and women who answered the survey.

Table 2. Gender of Consumer Responding To The Farmers' Market Survey.

SEX	%
Male	29
Female	71
Total	100

n=239

Of the 239 people who answered the survey, 71% were female and 29% were male. Also, 80% of these respondents identified themselves as the primary shopper in their households. Respondents next provided information on their age and household size. These distributions are reported in Table 3.

Table 3. Distribution of Age and Household Size of Respondents.

	Mean	Min.	Max.
Age	43	17	84
Household Size:			
Adults	2.04	1	6
Children	0.5	0	6

These respondents represent a comparatively older consumer group; the average age is approximately 43 years old. The average household size is broken down to show that the average number of adults, age 18 and up, is about 2.04 per household. The number of children living at home is very low, averaging less than 1. This is consistent with the age distribution showing that these consumers tend to be in their middle age.

These characteristics are similar to those found in a study of farmers' market shoppers conducted in Pennsylvania. A Penn State Cooperative report describes these older consumers as ".. adults who appreciate fresh and fine-tasting foods ... are alert and adventurous when it comes to buying product and they are willing to make special trips for quality," (Penn State Cooperative, 1993).

Respondents also gave information about their employment status, household income and level of education. These results are presented in Table 4, 5 and 6.

Table 4. Current Employment Status of Respondents.

OCCUPATION	**Percentage (%)**
Full-time	44
Part-time	16
Semi-retired	3
Fully-retired	12
Part-time Student	1
Full-time Student	17
Unemployed	6
Volunteer	1
Total	100

n=218

Table 5. Annual Household Income of Respondents.

	Percentage (%)
LESS THAN $20,000	30
$20,000-29,999	15
$30,000-39,999	16
$40,000-49,999	10
$50,000-59,999	8
$60,000-69,999	5
$70,000-79,999	7
$80,000-89,999	4
$90,000 OR MORE	5
Total	100

n=211

Table 6. Respondents' Highest Level of Education.

	Percentage (%)
High School Diploma	12
Some College or Technical School	16
Associate Degree	5
Bachelor's Degree	31
Master's Degree	20
Ph.D. or other advanced Degree	16
Total	100

n=230

The data in Table 4 indicate that 44% of the respondents are employed full-time, about 16% work part-time and another 17% are full or part-time students. Nearly 15% are fully or semi- retired. Further questions on the occupations of these respondents revealed that 35% were employed or affiliated with the University of Maine. Among these 84 people, 43% worked as staff, 34% were faculty, 21% were students and just over 2% were in administration.

According to the income distributions shown in Table 5, 31% of the respondents report an annual household income of $20,000 or less. The relatively low income levels are consistent with the employment data showing that less than half of the group is employed full-time and that a fairly high percentage of these people are students and retirees. Note that the education levels, reported in Table 7, indicate that these respondents tend to be highly educated; a total of 67% have at least a bachelor's degree.

Consumer Accessibility To The OFM:

This section gives information about the geographic reach of the market in terms of how far people travel to shop at the OFM as well as who they usually shop with. The section also looks at the effectiveness of certain forms of advertising in expanding consumer awareness of the market.

Most respondents drove to the University steam plant parking lot, the location of the OFM. Almost 7% walked and another 3% biked to the market. A few of the more adventurous patrons said they came to the market by way of boat or kayak along the Stillwater River (Table 7). There is a dock at this location which makes it easy to access the OFM from the river.

Table 7. How Do You Usually Get to the Orono Farmers' Market?

	Percentage (%)
Car	89
Walk	7
Bike	3
Boat/Kayak	1
Total	100

n=161

The round-trip distances traveled by these respondents are reported in Table 8. The average distance for a round-trip visit to the market was 3.28 miles indicating that most customers lived in a close proximity to the market. The shortest distance reported was 1/10 of a mile, and the furthest distance was 55 miles. A few visitors were from out-of-state, including residents from as near Massachusetts to as far as Florida.

The people who accompany the respondents may also influence how the respondent chooses to travel to the market, how far they are willing to travel as well as the types of other people who may be exposed to the market.

Table 8. Average Round Trip Mileage to the Orono Farmers' Market.

	Number of Respondents	Mean	Standard Deviation	Minimum	Maximum
Mileage	174	3.28	5.06	0.10	55.00

Among the consumers responding to this survey, the majority shop with another person, most often a spouse, but close to 15% said they often bring friends or relatives (Table 9). This is important information since it indicates that customers may be very influential in creating awareness of the market by bringing along friends and relatives. Another 16% said they shop with their children (either alone or with their spouse). This suggests that for some respondents the visit to the market is considered to be a family event.

Table 9. Who Usually Accompanies The Respondents To The Market?

	Percentage (%)
Nobody	40
Spouse	29
Children	9
Spouse and Children	7
Friends/Relatives	15
Total	100

n=214

Respondents were next asked how they first learned about the market. These responses are shown in Table 10.

Table 10. How Consumers First Learned About The Orono Farmers' Market.*

	Percentage (%)
Word of Mouth	44
Passed by on the road	49
Posters	21
Flyers	7
Local Newspaper	25
Maine Perspective	8
Radio (public service announcements)	2
Others	10

n=236

*The percentages sum to more than 100% due to multiple responses.

The majority of customers first learned of the market through informal mediums; nearly half learned about it simply by passing by on the road and about 44% heard about the market by word of mouth. About 1/4 learned of the market through the local newspaper.

Advertising flyers and the "Maine Perspective," a University events publications, were each mentioned by less than 10% of the respondents. Only 2% said they learned of the market through radio ads.

As a follow-up question to how patrons first learned of the market, they were asked if they had seen or heard any advertisement about the market. These responses are presented in Table 11 and 12.

Table 11. Percentage of Consumers Having Seen Or Heard Advertisements For The Orono Farmers' Market.

	%
Yes	62
No	38
Total	100.0

n=237

Table 12. Where Were The Ads?*

	YES (%)
Local Newspaper	53
Posters	47
Maine Perspective	17
Radio	3
Others	10

n=146

*The percentages sum to more than 100% due to multiple responses.

Altogether, 62% of the respondents said they had been exposed to some form of media advertisement on the OFM. Of these 146 respondents, 53% indicated that the ads were in their local newspaper while 47% saw posters that OFM organizers had distributed.

It is important to note that respondents mentioned other sources of information about the OFM including local organizations such as the Women-Infants-Children (WIC) package of pamphlets and information. Over 10% of the respondents indicated that they heard about the OFM from vendors at other farmers' markets such as those in Brewer and Ellsworth.

Purchasing Patterns:

Respondents were asked additional questions about their visit to the OFM to get a more detailed perspective on their purchasing patterns. One question of interest pertained to their general shopping habits at other markets. When asked about their visits to other farmers' markets, these respondents appeared to be very loyal to the OFM; about 67% said it was the only farmers' market they frequent.

Nearly three-quarters had visited the market on at least one other occasion in 1995. But 1/4 of the group first visited the OFM on the day of the survey. A few of these first-comers explained that they were tourists. Others were from out-of-town and had come for University activities such as homecoming, sports and exhibitions or craft fairs.

Among the 176 respondents who had previously visited the market, researchers were interested in how often they shopped at the market. Table 13 reports their responses.

These responses point out that customers tended to be quite consistent in their shopping ; a total of 57% said they shopped at the market at least once each week, while 26% visit the OFM about every two weeks and 17% shop once a month.

Table 13. How Often Do You Typically Shop At The Farmers' Market in Orono?*

	%
Once a month	17
Every two weeks	26
Once a week	44
Twice a week	13
Total	100

n=176

*For respondents who had previously visited the market in 1995

Not surprisingly, those who shopped at the market at least once each week lived in close proximity to the market; About 46% live in Orono, while 38% came from the neighboring city of Old Town. The remaining 16% represents people who come from more distant places like Bangor and Brewer, about 10 miles away.

Information was gathered about which shopping days were most popular. Table 14 shows the percentage of respondents who visit the market on each of the OFM days of operation. Saturdays attract 61% of the patrons while 6% come to the OFM only on Tuesdays. About 1/3 said they visit the market on both days.

Table 14. What Days Do You Typically Shop at the Farmers' Market?*

Shopping Days	%
Tuesdays	6
Saturdays	61
Both days	33
Total	100

n=175

*For respondents who had previously visited the market in 1995.

Another key interest area was the type of products consumers purchase at the market. The survey included a list of farm goods commonly sold at the market and respondents were asked to check particular items they usually purchase. Their responses are presented in Table 15.

Table 15. Specific Items Usually Purchased by Consumers at the Orono Farmers' Market*

	%
Animal & Dairy	
Fresh Eggs	30
Plants & Flowers	
Herb's	33
Perennials	31
Fruits	
Apples	53
Blueberries	47
Strawberries	40
Processed & Baked Goods	
Breads	35
Jams, Honey, Pickles, Vinegar's	27
Vegetables	
Beans	57
Corn	71
Cucumber	63
Tomatoes	63

n=177

*The percentages sum to more than 100% due to multiple responses. For respondents who had previously visited the market in 1995.

Items in the vegetable category were purchased most often, especially corn, identified by 71% of the respondents. Cucumbers and tomatoes were also popular; about 63% of the respondents said they usually buy each of these items.

Fruits generally came second in terms of items usually purchased. Just over 50% said they usually buy apples, 47% buy blueberries and about 40% buy strawberries. Roughly 30% said they usually buy items listed in the other product categories, including herbs and perennials, fresh eggs, and breads. The smallest proportion, 27%, said they typically buy jams, honey, pickles and vinegar's.

Respondents were next asked if there were any particular items they wanted to buy, but couldn't find at the OFM.

Among those who had shopped at the market before, 82% said that they were unable to purchase certain items (Table 16). Respondents listed a wide variety of items they couldn't find at the market. The list included seafood, more poultry, lamb, eggs, whole grain breads, low fat/ health foods, more organic vegetables and various on-site snacks.

Table 16. Percentage Of Respondents Who Could Not Find Specific Items They Wanted To Buy But Found Them Not Available At That Time.

	Percentage (%)
No	18
Yes	82
Total	100

n=66

*For respondents who had previously visited the market in 1995

The manner in which the OFM consumers use the fruits and vegetables is likely to affect their purchasing patterns. Table 17 reports the percentage of respondents who purchase items for processing. About 27% of the respondents buy products for freezing, canning or other processing methods. Respondents were most likely to process blueberries, strawberries and tomatoes.

Table 17. Percentage of Consumers Buy Fruits and Vegetables At the OFM for Home Processing.*

	Percentage (%)
Yes	27
No	73
Total	100

n=17

*For respondents who had previously visited the market in 1995

The next area of inquiry focused on consumer expenditures at the market and their willingness to pay a premium for certain OFM products. Respondents were first asked how much they typically spend during each shopping trip at the market.

The highest percentage, 48%, reported spending between \$5 and \$10 per visit (Table 18). Only 23% made purchases in the range of \$10-\$15 per visit. Further analysis revealed that those who visit the market once a week tended to spend the most at each visit; 63% of these patrons spend an average of \$10 or more. They also tended to have household incomes in the higher range with more than half reporting an annual income of \$40,000 to \$59,000.

To get a better idea of how consumers perceive the value of products sold at the market, respondents were asked if they were willing to pay more for conventionally grown produce sold at the market relative to conventionally grown produce sold at the supermarket. Table 19 shows the percentage of respondents who would pay a premium and how much more they are willing to pay.

Table 18. The Average Amount Spent by Consumers Per Market Visit*

	Percentage (%)
Less than \$5	16
\$5-\$10	48
\$10-\$15	23
\$15-\$20	7
\$20 or more	6
Total	100

n=176

*For respondents who had previously visited the market in 1995

Table 19. Are You Willing To Pay More For Conventionally Grown Produce At The Farmer's Market As Opposed To Conventionally Grown Produce Purchased At The Supermarket?

	Percentage			
No	28			
Yes	72			
Total: N=167	100.0			
How much more would you be willing to pay?	Average: 17%	St. Dev.: 10%	Minimum: 2% Maximum: 50%	N=96

Nearly 72% of the respondents said they would be willing to pay more for products at the OFM. Among these individuals, 96 provided more specific information about an acceptable price differential.

Their responses ranged from a low of 2% to a high of 50% with an average of 17%. In other words, if corn, the most popular item at the OFM was priced in the supermarkets at $2.00 per dozen, consumers would be willing to pay an average of about $2.34 per dozen at the market.

Respondents were asked similar questions about their willingness to pay for organically grown produce at the OFM in comparison to conventional produce at the supermarket.

More than 75% of the respondents said they would be willing to pay a premium for organic produce sold at the OFM relative to conventional produce at the supermarkets (Table 20). The average premium would approach 24%. This means, for example that a pint of *conventionally* grown strawberries might sell at $1.50. For the *organically* grown version of the product, consumers would be willing to spend an average of about $1.86.

Table 20. Are You Willing To Pay More For Organically Grown Produce At The Farmer's Market As Opposed To Conventionally Grown Produce Purchased At The Supermarket?

	Percentage			
No	25			
Yes	75			
Total: N=169				
How much more would you be willing to pay?	Average: 23.8%	St. Dev.: 18.7%	Minimum: 2% Maximum: 100%	N=97

Consumer Attitudes

This section discusses the consumers' opinion of the OFM. Respondents were given a list of possible reasons for buying a product at the market and asked to identify and rank the top three that were most important to them. Table 21 illustrates that 55% consumers ranked the quality of the produce as of primary importance in their decision to buy goods at OFM. Two other reasons that respondents ranked highly were the friendly atmosphere and the desire to

Table 21. Respondents Rankings of Important Reasons For Buying Goods At The Orono Farmers' Market?

Reasons	Most Important (%)	Second Most Important (%)	Third Most Important (%)
Quality of Produce	55	20	14
To Support Local Farmers	21	27	26
Health and Food Safety Concerns	14	15	8
Good Prices	4	4	4
Convenience	3	4	10
Friendly Atmosphere	1	21	26
Good Variety and Volume	1	6	4
Accepts WIC* checks	1	1	1
Consistency	0	1	1
Good Service	0	1	6
Total	100	100	100

n=164
*Women-Infants & Children Program

support local farmers. In fact, a total of 74% listed farmer support as either first, second or third most important reason for shopping at the OFM. On the other hand "Good Service" and "Consistency" were least often identified as important reasons.

Respondents consider the quality of the products at the OFM to be most important and they rate the OFM product quality very high. The data in Table 22 shows that 88% of the

Table 22. Consumers' Rating on the Quality of the Orono Farmers' Market Produce They Purchase.*

	Percentage (%)
Not Good (3)	1
4	1
5	10
6	43
Excellent (7)	45
Total	100

n=177

*For respondents who had previously visited the market in 1995

respondents rate the product quality at 6 or 7 points on a scale from 1 to 7, where 1 is "not good" and 7 is "excellent."

Respondents were next asked to compare products they buy at the OFM to those found at the supermarket. Table 23 reports the percentage of respondents who agreed/disagreed with particular characteristics they were asked to compare. Over 90% of the respondents, felt that OFM products taste better than the supermarket goods. Similarly, 90% believed that OFM products are fresher than supermarket goods.

Although a large majority responded with a clear opinion to these comparison questions, a substantial portion of respondents did not know if there was a difference between OFM goods and supermarket goods.

Table 23. Consumers Comparison of the Supermarket and Orono Farmers' Market Goods*

	Yes	No	Don't Know	Total
Are more nutritious	67	3	30	100
Taste better	95	1	4	100
Look better	89	5	6	100
Are fresher	96	0	4	100
Keep better and for longer	55	12	33	100
Are safer to consume	70	4	26	100

n=179

*For respondents who had previously visited the market in 1995

Respondents who patronize the OFM and have also visited other farmers' markets were asked to compare various characteristics of the different farmers' markets. Sixty-seven percent of the respondents indicated that the OFM has a more convenient location. Just over 40% felt that the atmosphere at the OFM was better. On the other hand, 1/3 felt that the variety was not as good as what they found at other farmers markets (Table 24).

Table 24. Respondents Compare The Orono Farmers' Market With Other Farmers' Markets That They Have Visited.

Compared To Other Farmers' Markets, OFM Has:	Yes	No	Same	Don't Know	Total
Better quality products	18	4	54	24	100
Better variety	21	**32**	25	22	100
More Consumer Activities	11	24	20	45	100
More Convenient Location	**67**	3	12	18	100
Better Atmosphere	**41**	6	33	20	100
More Ads & Promotions	10	19	14	57	100
More Consistent Hours	16	12	36	36	100
Better Prices	7	14	37	43	100

n=141

Respondents next listed their suggestions for improving services at the OFM

Table 25. Changes That Would Improve Services at the Orono Farmers' Market*

	Percentage (%)
More Sellers	56
More Volume and Variety	51
Information on the products available on next market day	36
Information and Ideas (recipes)	25
Additional Activities & Entertainment	10
Miscellaneous**	10
Longer Hours	9
More point of purchase ads	3
Better Sanitation	0
Better Location	0

n=232

*The percentages sum to more than 100% due to multiple responses.

**Includes more shelter from the sun, uniform to identify vendors etc.

"More Sellers" was the most common suggestion offered by 56% of respondents. Over 50% also suggested adding volume and variety. These ideas are related since by having more sellers, the market increases its capacity to provide larger quantities of farm goods and more product diversity. Among other suggestions, 36% would like to receive information on what products would be available on the following market day, or month. About 1/4 respondents would like to have recipes and information about using the products (Table 25).

Further inquires about consumer satisfaction with the OFM revealed that about 15% were disappointed with products or services (Table 26).

Table 26. Percentage of Consumers Who Have Been Disappointed With the Orono Farmers' Market Products

	Percentage (%)
Yes	15
No	85
Total	100

n=228

Among these 15% , the most common complaint was the flavor of corn listed by 28%. Another 13% were disappointed in the quality of baked goods items that they had purchased. A few complained about high prices of vegetables.

Table 27. Preferred Days and Times of Operation for the Orono Farmers' Market*

Days	7-11 am	11-2 p.m.	2-5 p.m.	5-8 p.m.	no preference
Monday	4	2	1	4	4
Tuesday	17	7	8	6	5
Wednesday	6	2	2	5	2
Thursday	7	2	2	2	1
Friday	6	1	4	5	4
Saturday	67	39	10	2	8
Sunday	11	11	8	2	3

n=186

*The percentages do not equate to 100% due to multiple responses.

Respondents indicated a preference to shop at the OFM on Saturday mornings and early afternoons (Table 27). Sixty-seven percent of the respondents preferred the 7 a.m. to 11 a.m. schedule on Saturdays. While 39% approved of Saturday market hours scheduled for 11 a.m. to 2 p.m. On Tuesday respondents prefer to shop between 7 am to 11 am. Most respondents wrote comments that demonstrated their satisfaction with the current market time and day (Tuesday and Saturday at 7 am to 11 am). For example one comment read; " no need to change the time, its fine the way it is."

Consumer Purchasing Behavior & Preferences

This section presents the results of a more detailed analysis of the data. Tables 28 through to Table 32 illustrate statistically significant relationships between the amount the consumers at the OFM spend per visit and the reported annual household income. Also, the analysis determines the relationship between the frequency of consumer visits to the OFM and the amount the usually spends per market visit. This information should provide a better understanding of the interrelationships between certain respondent characteristics and their shopping patterns.

Further analysis of the amount spent by respondents per market visit demonstrates that over 60% of the $20,000 or less income group spend between $5-$10 on each visit to the market (Table 28).

In addition, over half of the respondents with incomes in the $20,000 to $39,999 range spend between $5-$10 per market visit. In the highest income group only 33% reported spending $5-$10 per market visit. These respondents were more likely to spend $10-15 per visit in comparison to the other groups.

Table 28. Average Amount Spent by Respondents Based on Annual Household Incomes.

	Less than $20,000 (%)	**$20,000 to $39,999 (%)**	**$40,000 to $59,999 (%)**	**$60,000 or more (%)**
Less than $5	31	6	4	8
$5 - $10	60	55	46	33
$10 - $15	4	26	31	41
$15 or more	5	13	19	18
Total	100.00	100.00	100.00	100.00

$X^2 = 37.211$ df = 9 Prob. = 0.000

Among those who report the highest expenditure of $15 or more per visit, over 70% shop at the market at least once each week (Table 29).

Table 29. How Often Respondents Shop At The OFM Based On Average Amount Spent Each Visit

	Less than $5	**$5 - $10**	**$10 - $15**	**$15 or more**
Once a month	24	23	8	5
Every two weeks	25	28	15	23
Twice a week	13	14	20	9
Once a week	38	35	58	64
Total	100	100	100	100

$x^2 = 18.697$ df = 9 Prob. = 0.028

Nearly 80% of those who spend between $10-$15 per visit also said they shop at least once a week. Almost 50% of those who spend $5 or less visit the OFM once a week. In comparison, just over 40% of those who spend less than $5 per visit shop once a week or more.

Over half of the consumers who report an annual household income of $20,000-$39,999 and also those with incomes of $40,000 to $59,999 shop once a week at the OFM (Table 30). Almost 44% of the consumers who have an income of $60,000 or more also shop once a week at the market. These results also show that those in the lowest income group are more likely to report shopping only once each month and less likely to shop weekly in comparison to the respondents in the other income categories.

Table 30. How Often Respondents Shop At The OFM Based On Annual Household Incomes.

	Less than $20,000	**$20,000 to $39,999**	**$40,000 to $59,999**	**$60,000 or more**
Once a month	32	9	7	10
Every two weeks	28	26	30	23
Twice a week	7	15	11	23
Once a week	**34**	**51**	**52**	**44**
Total	100	100	100	100

x2 = 17.27 df = 9 Prob. = 0.045

Only 7% within the $20,000 or less income group visit the market as often as twice a week. It generally appears that in comparison to the other groups, those in the lowest income category shop less often.

Further analysis on respondents' willingness to pay a premium for OFM products showed that 86% of respondents who spend $15 or more per visit to the OFM said they would pay a premium on organically grown produce. Table 31 illustrates that in the $10-$15 expenditure range, 84% are willing to pay more for organic produce at the farmers' market as opposed to conventionally grown produce at their local supermarket. Almost 75% respondents expenditures of $5-$10 are willing to pay more for organic produce at the OFM.

Table 31. Respondents' Willingness To Pay A Premium For Organic Produce At The OFM, Based On Amount Spent Per Visit

	Less than $5	**$5 to $10**	**$10 to $15**	**$15 or more**
YES	54	74	84	86
NO	46	26	16	14
Total	100	100	100	100

x2 = 9.220 df = 3 Prob. = 0.027

Table 32 illustrates that those respondents who spend $15 or more per visit were generally willing to pay the highest premium for OFM produce. For organics, these respondents were willing to pay an average of 34% more, and for conventional produce the average was 27% more.

Table 32. Average Additional Percentage Amount Respondents Would Spend for Conventional and Organic Produce at the Farmers Market Based On Average Expenditures at the OFM.

	Additional Amount Consumers Would Spend*	
Average Expenditures Per Visit	**Conventional Produce (%)**	**Organic Produce (%)**
$5 or less	17	21
$5-$10	15	20
$10-$15	17	26
$15 or more	**27**	**34**

*For consumers who indicated that they would spend more.

Differences in average premiums were also analyzed on the basis of respondents' residence and on household incomes. There were no significant differences between the groups in any of the statistical tests.

Summary

1. Promotion & Publicity

Altogether, 62% of the respondents at the OFM report having seen or heard ads about the market. Among these, another 62% mentioned that the ads were in the local newspaper or displayed as posters. Once again the effectiveness of advertising by word of mouth is reinforced here with 44% of the OFM respondents first learning about the market in this manner. Fifty percent passed by on the road and noticed the sign and/or the market itself then decided to shop there. The Maine Perspective (a campus publication), the radio station and flyers do not contribute much to the overall public awareness of the OFM.

2. Consumer Information And Time Preferences

Shoppers at the OFM are predominantly female. The average age is 43 years and most often the shopper visits the OFM alone or in the company of the spouse (29%). Only a meager 9% come with children to the OFM.

Most shoppers are employed full time. However less than 34% of the shoppers are employed at the University of Maine in the Town of Orono. Almost 64% of the respondents mention living in Orono, while 62% work in Orono. On the other hand, 31% reside and another 31% work in the neighboring towns of Bangor and Old Town.

Respondents are content with having market days on Saturday (67%) between the hours of 7 am and 11 am. In addition to Saturdays, 17% of the respondents approve of Tuesday market days also at 7 am to 11 am.

3. Product Pricing Mechanism

The market serves a consumer group in which 30% have household incomes of $20,000 or less and 70% earn more than $20,000. Respondents display a willingness to pay more for organic and conventional goods at the OFM as opposed to making similar purchases at a local supermarket. On average, they indicated they would pay 17% more for the conventional produce and nearly 24% more for the organic product.

4. No Need To Establish Amusement Activities For Consumers

Over 50% of the patrons at the OFM mentioned that there is a need to improve variety and quantities of goods available on each market day. Whereas only 10% of respondents requested additional activities to be provided at the market for entertainment purposes. The latter is a small fraction of the consumer population. Most consumers are concerned with the quality of the OFM products and the quality of service at their local farmers' market.

The demographic profile reveals that respondents have a few children. Correspondingly, very few respondents reported shopping at the OFM with their children. This further indicates that the focus should be directed toward expanding the variety and quantity of goods available at the OFM rather than on creating entertainment for the consumers.

Recommendations

1. Increase In Publicity

First, the consumer needs to be made aware of the operations of the OFM. With 34% respondents affiliated with the Orono University Campus, much advertising can be done on the campus itself. The OFM can alert clubs, societies and organizations on campus. The farmers can increase the distribution of posters throughout Orono and the neighboring towns such as Old Town and Bangor too. Farmers can also place information in the local newspaper on a regular basis.

Second, consumers also need to know what goods will be available on the following market day. A mention of the vendors who will be present is helpful information for the consumer. This can be done in the local paper or through the circulation of pamphlets to consumers on each market day. In addition, posters can be used to illustrate the products that are sold at the OFM based on the period in the summer when the products are expected to be brought to market. For example, it is important to the consumer to know when certain farm products are in season and therefore could be expected at the OFM.

This will ensure that consumers visit the market with an expectation to find a product that they wish to purchase. Too often disappointment and dissatisfaction with a business arises because of the lack of consistency in the availability of a product.

Lastly, farmers must capitalize on the consumer spreading information about the market by word of mouth. Therefore, OFM brochures given to consumers as they shop will be effective in providing current patrons with information to share with others.

2. Increase In The Variety And Quantity

Very few consumers (15%) expressed disappointment with the OFM products. To reduce the inconvenience to consumers and thus improve consumer satisfaction, attempt to provide the consumer with the diversity of products that parallel the supermarket counterpart.

Shoppers typically shop on Saturdays, mostly purchasing items such as: tomatoes, corn, cucumber, beans, breads, apples, blueberries, strawberries, herbs, perennials and fresh eggs. The respondent indicated a wish to find **poultry and seafood** items at the OFM. The 'wish list' also included hand-made crafts, more organic foods, dairy products like cheeses and more fresh eggs.

It is difficult to ensure a consistent availability of varieties of farm produce because OFM farm goods are limited to locally grown produce. The variety and quantity of farm produce available at the OFM fluctuates according to the production cycle during each market season. Nonetheless, attempts *can* be made to provide the consumer with as much variety as is available locally. This implies that the OFM has to consider encouraging other local farmers to bring their produce to the OFM. Therefore, inviting a dairy farmer to join the OFM organization and other moderate to large sized farms would improve the quantity of products available at the OFM and it would signal to the consumer that there is a broader and more satisfactory variety too.

3. Increase Efficiency Of Hours Of Operation On Market Days

Respondents were satisfied with the days selected for the farmers market. The Saturday morning hours are preferred by over 67% of the respondents and over 17% are content with Tuesday mornings too. Consumers need to have consistent hours and they need a dependable schedule of farms and products which will be present at the OFM on each market day.

It is suggested that vendors sign up for days on which their products will be represented and thus establish a commitment to be there on a particular market day. By creating a dependable schedule for operation, consumers can plan and budget accordingly.

4. Increase Price Differentials

Farmers can improve revenues by bringing all their products to the market. The product should be separated according to various criteria such as freshness, variety, size and other product attributes. The products can even be displayed according to the different quality standard.

Once the products have been distinguished they should be priced accordingly and thus provide the consumer with the different range of prices and an explanation for the differential too. For the vendor, the advantage is that they can bring a larger proportion of their crop and still maintain the quality standard that are expected by the consumer. In addition, the vendor can be entitled to charge a premium for the best quality products without discouraging consumer patronage.

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APPENDIX

Introduction and Consumer Survey

" Good morning sir/madam, my name is -----. The Department of Resource Economics and Policy is conducting a survey to help the farmers at the OFM to operate more effectively and to be able to serve the community better. Would you be interested in filling out this survey and returning it to the University of Maine. It would be appreciated."

Date: ______________
Time: ______________

Orono Farmers' Market Consumer Survey

This survey is being conducted by the Resource Economics and Policy department at the University of Maine in Orono. Its purpose is to obtain information about current patrons of the Orono Farmers' Market, and to assist local farmers at the market in meeting your needs. Please read each question and respond by drawing a circle around the appropriate number. If the option "other" appears in the questionnaire, please use the space provided to fill in additional items as necessary. <u>All your answers will be completely confidential</u>. Thank you for your help.

Section A. Use of the Farmers Market

---

1. Is this your first visit to the Orono Farmers' Market this year? (CIRCLE ONE NUMBER)

   1 YES ⟶ **If <u>Yes</u> go the Section B.**
   2 NO

2. How often do you typically shop at the farmers' market in Orono? (CIRCLE ONE NUMBER)

   1 Once a month or less
   2 Every two weeks
   3 Twice a week
   4 Once a week

3. On what days do you <u>typically</u> do your shopping at the Orono Farmers' Market? (CIRCLE ONE NUMBER)

   1 Tuesdays
   2 Saturdays
   3 Both days

4. How do you usually get to the Orono Farmers' Market? (CIRCLE ONE NUMBER)

1 Car
2 Bus
3 Walk
4 Bike
5 Other ______________________________

5. On average, how far do you travel to get to the Orono Farmers' Market? (FILL IN THE BLANK)

________ miles

6. What specific item(s) do you usually buy at the Orono Farmers' Market? (CIRCLE ALL THAT APPLY)

Animal & Dairy
1 Chickens/Broilers
2 Fresh Eggs
3 Turkey
4 Other ____________

Plants & Flowers
1 Annuals
2 Cut Flowers
3 Dried Flowers
4 Herbs
5 Perennials
6 Seedlings
7 Other ____________
____

Fruits
1 Apples
2 Blueberries
3 Raspberries
4 Strawberries
5 Other ____________

Processed & Baked Goods
1 Bagels
2 Breads
3 Jams, jelly, pickles vinegars, honey, etc.
4 Cookies
5 Muffins
6 Other ____________
____

Vegetables
1 Asparagus
2 Beans
3 Beets
4 Broccoli
5 Carrots
6 Corn
7 Cucumber
8 Eggplants
9 Fiddleheads
10 Fresh Greens
11 Garlic
12 Lettuce
13 Onions
14 Peas
15 Peppers
16 Potatoes
17 Pumpkins
18 Rhubarb
19 Squash
20 Turnips
21 Tomatoes
22 Oriental vegetables
23 Other ____________
____

6a. What specific items would you wish to buy at the Orono Farmers' Market that are not currently available? (Please list)______________________________

____

7. In general, what are the primary reasons you buy products from the Orono Farmers' Market? **(Please rank your three most important reasons (only three) from 1 to 3 with 1 being the <u>most</u> important.)**

________Good Prices	________Good Variety and Volume
________Quality of Produce	________Health and Food Safety Concern
________Friendly Atmosphere	________Convenience
________Good Service	________Consistency
________To Support Local Farmers	________Other______________

8. Please rate the quality in general of all the goods you buy at the Orono Farmers' Market. (CIRCLE THE NUMBER ON THE SCALE BELOW)

1	2	3	4	5	6	7
Poor						Excellent

9. On average, how much do you typically spend on each visit to the Orono Farmers' Market? (CIRCLE ONE NUMBER)

1	Less than $5	4	$15 to $19.99
2	$5 to $9.99	5	$20 or more
3	$10 to $14.99		

10. Do you freeze or can any of the fruits or vegetables you purchase at the Orono farmers' market? (CIRCLE ONE NUMBER)

1 YES
2 NO

10a. If yes to question 10, which fruits or vegetables do you typically process? (CIRCLE ALL THAT APPLY)

Vegetables

1 Asparagus
2 Beans
3 Beets
4 Broccoli
5 Carrots
6 Corn
7 Cucumber
8 Eggplants
9 Fiddleheads
10 Fresh Greens
11 Garlic
12 Lettuce
13 Onions
14 Peas
15 Peppers
16 Potatoes
17 Pumpkins
18 Rhubarb
19 Squash
20 Tomatoes
21 Turnips
22 Other ____________

____

Fruits

22 Apples
23 Blueberries
24 Raspberries
25 Strawberries
26 Wildberries
27 Other ____________

____

11. When comparing supermarket and farmers' market products, would you say that the farmers' market products: (CIRCLE ALL THAT APPLY)

	Yes	No	Don't Know
Are more nutritious	1	2	3
Taste better	1	2	3
Look better	1	2	3
Are fresher	1	2	3
Keep better and for longer	1	2	3
Are safer to consume	1	2	3

12. Are you willing to pay more for conventionally grown produce at the farmer's market as compared to conventionally grown produce purchased at the supermarket? (CIRCLE ONE NUMBER)

1 YES ⟶ If yes, how much more would you spend?________%
2 NO

13. Are you willing to pay more for **organically** grown produce at the farmer's market as compared to **conventionally** grown produce purchased at the supermarket? (CIRCLE ONE NUMBER)

1 YES ⟶ If yes, how much more would you spend?________%
2 NO

Section B. Advertising and Suggestions for Improvement

14. How did you first learn about the Orono Farmers' Market? (CIRCLE ALL THAT APPLY)

    1 Word of mouth
    2 Passed by on the road
    3 Posters
    4 Flyers
    5 Local Newspaper
    6 Maine Perspective
    7 Radio (Public Service Announcements)
    8 Other(s) ______________________

    ____

15. Have you ever seen or heard any ads about the farmers' market in Orono? (CIRCLE ONE NUMBER)

    1 YES
    2 NO

15a. If yes to question 15, where were the ads? (CIRCLE ONE NUMBER)

    1 Local Newspaper
    2 Maine Perspective
    3 Posters
    4 Radio
    5 Other ______________________

    ____

16. Do you shop at other farmers' markets in Maine? (CIRCLE ONE NUMBER)

    1 YES
    2 NO

16a. If yes to question 16, please specify where you shop. ______________________

____

17. When comparing the Orono Farmers' Market and the other farmers' markets that you have visited, would you say that the Orono Farmers' Market has: (CIRCLE ALL THAT APPLY)

	Yes	No	Same	Don't Know
Better Quality of Product	1	2	3	4
Better Variety of Goods Available	1	2	3	4
More Consumer Activities Available	1	2	3	4
More Convenient Location	1	2	3	4
Better Atmosphere	1	2	3	4
More Ads & Promotions	1	2	3	4
More Consistent Hours	1	2	3	4
Better Prices	1	2	3	4

18. What can the farmers do to improve their service to you? (CIRCLE ALL THAT APPLY)

1 Longer hours
2 Better sanitation
3 Better location
4 More volume and variety
5 More sellers
6 Additional activities and entertainment
7 More point of purchase ads.
8 Information and ideas on the use of products (e.g. recipes)
9 Information on what products will be available on the following market day
10 Other(s) ____________________

____

19. Have you ever been disappointed with any Orono Farmers' Market products? (CIRCLE ONE NUMBER)

1 YES
2 NO

19a. If yes to question 19, please indicate the type of problem(s) by circling the appropriate number. (CIRCLE ALL THAT APPLY)

	Appearance	Flavor	Poor Quality	Prices Too High	Other
Fruits	1	2	3	4	5 ____________
Vegetables	1	2	3	4	5 ____________
Flowers	1	2	3	4	5 ____________
Baked Goods	1	2	3	4	5 ____________

20. Please indicate the three most preferred times when you would like the Orono Farmers' Market to be open for business? **(Please circle only the three most preferred times.)**

	7-11am	11-2pm	2pm-5pm	5pm-8pm	No Preference
Monday	1	2	3	4	5
Tuesday	1	2	3	4	5
Wednesday	1	2	3	4	5
Thursday	1	2	3	4	5
Friday	1	2	3	4	5
Saturday	1	2	3	4	5
Sunday	1	2	3	4	5

Section C. Demographics

21. Are you male or female? (CIRCLE ONE NUMBER)

    1 Male
    2 Female

22. Are you the primary member of your household who does the shopping? (CIRCLE ONE NUMBER)

    1 YES
    2 NO

23. How many adults live in your household? (FILL IN THE BLANK)

    ____

24. How many children under 18 years old live in your household? (FILL IN THE BLANK)

    ____

25. What is the name of the town you live in? (FILL IN THE BLANK)

    ____

26. What is the name of the town you work in? (FILL IN THE BLANK)

    ____

27. Who usually accompanies you to the Orono Farmers' Market?

    1 Nobody
    2 Spouse
    3 Children
    4 Spouse and Children
    5 Friends and Relatives

28. With respect to your current occupation, are you: (CIRCLE ONE NUMBER)

    1 Working Full-time
    2 Working Part-time
    3 Semi-Retired, working part-time
    4 Fully Retired
    5 Part-time student
    6 Full-time student
    7 Not presently employed

29. Are you currently employed at the University of Maine in Orono? (CIRCLE ONE NUMBER)

1 YES
2 NO

29a. If yes to question 29, are you currently employed as: (CIRCLE ONE NUMBER)

1 Faculty
2 Staff
3 Administration
4 Other ______________________

30. What is your annual household income? (CIRCLE ONE NUMBER)

1 Under $20,000
2 $20,000 to $29,999
3 $30,000 to $39,999
4 $40,000 to $49,999
5 $50,000 to 59,999
6 $60,000 to $69,999
7 $70,000 to $79,999
8 $80,000 to $89,999
9 $90,000 and more

31. How old were you on your most recent birthday? (FILL IN THE BLANK)

____

32. What is the highest level of education you have received? (CIRCLE ONE NUMBER)

1 Eight years or less
2 Some High School
3 High School degree or equivalent
4 Some College or technical school
5 Associate degree
6 BA degree or equivalent
7 MA degree or equivalent
8 Advanced degree (MD, Ph.D., etc.)

To return the questionnaire, simply hand it to the interviewer or refold it with the postage paid return address to the outside, tape it closed or staple (twice), and drop it in the mail.

THANK YOU FOR YOUR TIME